

W-CDMA Essential Patents for W-CDMA Test Equipment Products

Essentiality Cross Reference Chart (Other claims may also be essential)

| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|--|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 1 BS, T | Siemens | US 6389300B2 | | 04/05/2021 | Method for data transmission in a mobile radio system, mobile station, and base station | 10, 34, 51 | TS25.212 V4.4.0 S4.4, TS25.212 V4.4.0 S4.4.4 |
| BS, RNC, T | Siemens | JP 3831612 | | 02/11/2019 | Method for data transmission in a mobile radio system, mobile station, and base station | 2, 12, 20 | TS25.133 V4.5.0 S5.3.1, TS25.201 V4.3.0 S4.2.1, TS25.212 V4.4.0 S4.4, TS25.212 V4.4.0 S4.4.4, TS25.215 V4.4.0 S4, TS25.215 V4.4.0 S5.1, TS25.215 V4.4.0 S5.1.1, TS25.215 V4.4.0 S5.1.11, TS25.215 V4.4.0 S5.1.2, TS25.215 V4.4.0 S5.1.3, TS25.215 V4.4.0 S5.1.4, TS25.215 V4.4.0 S5.1.5, TS25.215 V4.4.0 S5.1.8, TS25.215 V4.4.0 S5.1.9, TS25.215 V4.4.0 S6.1.1.1, TS25.304 V4.5.0 S5.2.6.1.4, TS25.304 V4.5.0 S5.4.3, TS25.331 V4.5.0 S8.3.5, TS25.331 V4.5.0 S8.3.7.4 |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

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|--|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 2 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | JP 2993554 | | 03/04/2015 | Transmission power control method and a communication system using the same | 1, 2, 4, 5, 6, 8 | TS25.211 V5.0.0 S5.2, TS25.211 V5.1.0 S5.2.1, TS25.214 V5.1.0 B.2, TS25.214 V5.1.0 S5.1.2, TS25.214 V5.1.0 S5.2, TS25.433 V5.1.0 S8.2.17, TS25.433 V5.1.0 S9.1.36 |
| BS, RNC, T | NTT DoCoMo | EP 0682418 | DE, FR, GB, IT, SE | 12/05/2015 | Transmission power control for mobile radio | 3, 8 | TS25.214 V3.12.0 Annex B.2, TS25.214 V3.12.0 S3, TS25.214 V3.12.0 S5, TS25.331 V3.21.0 S10, TS25.331 V3.21.0 S8, TS25.433 V3.14.2 S8, TS25.433 V3.14.2 S9 |
| BS, RNC, T | NTT DoCoMo | US 5566165 | | 11/05/2015 | Transmission Power Control Method and a Communication System Using the Same | 1, 4, 6, 9 | TS25.211 V5.0.0 Fig. 1, TS25.211 V5.0.0 S5.2.1, TS25.214 V5.0.0 Annex B2, TS25.214 V5.0.0 S5, TS25.214 V5.0.0 S5.1.2.2.1, TS25.214 V5.0.0 S5.1.2.2.2, TS25.214 V5.0.0 S5.1.2.5.1, TS25.214 V5.0.0 S5.1.2.7, TS25.214 V5.0.0 S5.2.1.2.1, TS25.214 V5.0.0 S5.2.1.2.2, TS25.215 V5.0.0 S5.2.2, TS25.331 V5.0.0 S10.2.1, TS25.331 V5.0.0 S10.2.22, TS25.331 V5.0.0 S10.3.6.39, TS25.331 V5.0.0 S14.9.1, TS25.331 V5.0.0 S8.6.6.8, TS25.427 V5.0.0 S5.4, TS25.433 V5.0.0 S8.2.17.2, TS25.433 V5.0.0 S9.1.36, TS25.433 V5.0.0 S9.1.39.1, TS25.433 V5.0.0 S9.1.39.2 |
| BS, RNC, T | NTT DoCoMo | CN 95105384 | | 12/05/2015 | A Transmission Power Control Method and a Communication System Using the Same | 1, 4 | TS25.214 V5.0.0 S5, TS25.214 V5.0.0 S5.1, TS25.214 V5.0.0 S5.1.2.1, TS25.214 V5.0.0 S5.1.2.2.1, TS25.214 V5.0.0 S5.1.2.7, TS25.214 V5.0.0 S5.2, TS25.215 V5.0.0 S5.2.2, TS25.331 V5.0.0 S10.2.1, TS25.331 V5.0.0 S10.2.22, TS25.331 V5.0.0 S10.3.6.39, TS25.331 V5.0.0 S8.6.6.8, TS25.427 V5.0.0 S5.4 |
| BS, RNC, T | NTT DoCoMo | CN 00125988 | | 12/05/2015 | A Transmission Power Control Method and a Communication System Using the Same | 1, 3 | TS25.211 V5.0.0 Fig. 1, TS25.211 V5.0.0 S5.2.1, TS25.214 V5.0.0 Annex B2, TS25.214 V5.0.0 S5, TS25.214 V5.0.0 S5.1.2.2.2, TS25.214 V5.0.0 S5.2.1.2.1, TS25.214 V5.0.0 S5.2.1.2.2, TS25.331 V5.0.0 S14.9.1, TS25.433 V5.0.0 S8.2.17.2, TS25.433 V5.0.0 S9.1.36, TS25.433 V5.0.0 S9.1.39.1, TS25.433 V5.0.0 S9.1.39.2 |

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|--|--------------------------------|----------------------|---|---|---|-------------------------|--|
| BS, RNC, T | NTT DoCoMo | KR 143837 | | 10/05/2015 | Transmission Power Control Method and a Communication System Using the Same. | 1, 3, 6, 8 | TS25.211 V3.12.0 Fig. 1, TS25.211 V3.12.0 S5.2.1, TS25.214 V3.12.0 Annex B.2, TS25.214 V3.12.0 S5.1, TS25.214 V3.12.0 S5.1.2.2.1, TS25.214 V3.12.0 S5.1.2.2.2, TS25.214 V3.12.0 S5.1.2.5.1, TS25.214 V3.12.0 S5.1.2.6, TS25.214 V3.12.0 S5.1.2.7, TS25.214 V3.12.0 S5.2, TS25.214 V3.12.0 S5.2.1.2.1, TS25.214 V3.12.0 S5.2.1.2.2, TS25.215 V3.13.0 S5.2.2, TS25.331 V3.21.0 S10.2.1, TS25.331 V3.21.0 S10.2.22, TS25.331 V3.21.0 S10.3.6.39, TS25.331 V3.21.0 S14.9.1, TS25.331 V3.21.0 S8.6.6.8, TS25.427 V3.11.0 S5.4, TS25.433 V3.14.0 S8.2.17.2, TS25.433 V3.14.0 S9.1.36, TS25.433 V3.14.0 S9.1.39.1, TS25.433 V3.14.0 S9.1.39.2 |
| | | CA 2149095 | | 10/05/2015 | Transmission Power Control Method and Communication System Using the Same. | 1, 3, 6, 8 | TS25.211 V3.12.0 Fig. 1, TS25.211 V3.12.0 S5.2.1, TS25.214 V3.12.0 Annex B.2, TS25.214 V3.12.0 S5.1.2.2.1, TS25.214 V3.12.0 S5.1.2.5.1, TS25.214 V3.12.0 S5.1.2.6, TS25.214 V3.12.0 S5.2.1.2.1, TS25.214 V3.12.0 S5.2.1.2.2, TS25.215 V3.13.0 S5.2.2, TS25.331 V3.21.0 S10.2.1, TS25.331 V3.21.0 S10.2.22, TS25.331 V3.21.0 S10.3.6.39, TS25.331 V3.21.0 S14.9.1, TS25.331 V3.21.0 S8.6.6.8, TS25.427 V3.11.0 S5.4, TS25.433 V3.14.2 S8.2.17.2, TS25.433 V3.14.2 S9.1.36.1, TS25.433 V3.14.2 S9.1.39.1, TS25.433 V3.14.2 S9.1.39.2 |
| 3 | | | | | | | |
| BS, T | Mitsubishi | JP 3320711 | | 05/03/2019 | Spread spectrum communication device and spread spectrum communication method | 1, 8 | TS25.212 V3.11.0 S4 |
| BS, T | Mitsubishi | US 6885648B2 | | 05/03/2019 | SPREAD SPECTRUM COMMUNICATION DEVICE AND SPREAD SPECTRUM COMMUNICATION METHOD | 1, 3 | TS25.101 V3.13.0 Annex A.5, TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 Fig. 11, TS25.212 V3.11.0 Fig. 14(1), TS25.212 V3.11.0 Fig. 15(1), TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 S4.2.11, TS25.212 V3.11.0 S4.4, TS25.212 V3.11.0 S4.4.3, TS25.212 V3.11.0 S4.4.3.1, TS25.212 V3.11.0 S4.4.3.2 |
| 4 | | | | | | | |
| BS, T | Siemens | EP 1075738B1 | DE, FR, GB | 07/07/2018 | Data transfer with interruption phases | 1, 12, 13 | TS25.212 V4.4.0 S4, TS25.215 V4.4.0 |
| BS, T | Siemens | US 7095730 | | 30/10/2020 | Data transmission with interruption phases. | 10 | TS25.201 V4.3.0 S4.2.1, TS25.212 V4.4.0 Figure 11, TS25.212 V4.4.0 figure 12, TS25.212 V4.4.0 figure 14, TS25.212 V4.4.0 figure 15, TS25.212 V4.4.0 S4.1, TS25.212 V4.4.0 S4.4, TS25.212 V4.4.0 S4.4.1, TS25.212 V4.4.0 S4.4.4 |

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|---|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 5 | | | | | | | |
| BS, CN, RNC, T | Siemens | EP 1119925B1 | DE, ES, FR, GB, GR, IE, IT, NL, PL | 09/10/2019 | METHOD AND RADIO COMMUNICATION SYSTEM FOR REGULATING POWER BETWEEN A BASE STATION AND A SUBSCRIBER STATION | 1, 9 | TS25.212 S4.4, TS25.214 S5 |
| BS, CN, RNC, T | Siemens | JP 4313952 | | 08/10/2019 | Method and radio communication system for regulating power between a base station and a subscriber station | 1, 9 | TS25.212 V4.4.0 Fig 11, TS25.212 V4.4.0 S4.4, TS25.214 V4.3.0 S5.1, TS25.214 V4.3.0 S5.1.2.1, TS25.214 V4.3.0 S5.1.2.2.1, TS25.214 V4.3.0 S5.1.2.3, TS25.214 V4.3.0 Table 1 |
| BS, CN, RNC, T | Siemens | US 6885875 | | 08/10/2019 | Method and radio communication system for regulating power between a base station and a subscriber station. | 25 | TS25.214 V4.3.0 S5.1.2.1, TS25.214 V4.3.0 S5.1.2.2.1, TS25.214 V4.3.0 S5.1.2.3, TS25.214 V4.3.0 Table 1 |
| 6 | | | | | | | |
| BS, T | Mitsubishi | JP 3328642 | | 17/08/2013 | Sound discrimination apparatus and sound discrimination method | 1, 5 | TS26.094 V3.0.0 S4 |
| 7 | | | | | | | |
| BS, RNC, T | Siemens | DE 59910602 | | 09/12/2018 | METHOD FOR TRANSMITTING DATA IN A RADIO COMMUNICATION SYSTEM | 1, 10 | TR25.922 V3.7.0 S8.1.4, TS25.104 V3.12.0 S5.2, TS25.104 V3.12.0 S5.4.1, TS25.211 V3.12.0 S5.3.2, TS25.211 V3.12.0 S5.3.3.6, TS25.213 V3.8.0 S4.3.1, TS25.213 V3.8.0 S5.2.1, TS25.331 V3.16.0 S10.3.5.20, TS25.331 V3.16.0 S10.3.6.43, TS25.331 V3.16.0 S10.3.6.70, TS25.331 V3.16.0 S8.6.6.10 |
| CN, T | Siemens | EP 1135955B1 | DE, FR, GB | 01/12/2019 | METHOD FOR DATA TRANSMISSION IN A RADIO COMMUNICATIONS SYSTEM | 1, 10 | TR25.922 V3.7.0 S8.1.4, TR25.922 V3.7.0 Table 8-1, TS25.104 V3.12.0 S5.4.1, TS25.211 V3.12.0 S5, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3.2, TS25.211 V3.12.0 S5.3.3.4, TS25.211 V3.12.0 S5.3.3.6, TS25.211 V3.12.0 Table 21, TS25.213 V3.8.0 Fig. 4, TS25.213 V3.8.0 S5.2.1, TS25.331 V3.16.0 S10.3.5.20, TS25.331 V3.16.0 S10.3.6.43, TS25.331 V3.16.0 S10.3.6.70, TS25.331 V3.16.0 S8.6.6.10 |
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|---|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 8 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | JP 2801967 | | 09/02/2015 | Method and system for CDMA mobile radio communication | 1, 18, 23, 40 | TR21.905 V5.2.0 S3, TS25.211 V5.0.0 S4, TS25.211 V5.0.0 S5, TS25.213 V5.0.0 S4, TS25.213 V5.0.0 S5, TS25.301 V5.0.0 S5, TS25.401 V5.2.0 S6, TS25.401 V5.2.0 S7, TS25.402 V5.0.0 S4 |
| BS, RNC, T | NTT DoCoMo | EP 693834B1 | DE, GB, IT, SE | 09/02/2015 | Method and system for CDMA mobile radio communication | 1, 17, 20, 36, 39 | TS25.201 V3.4.0 S4.1, TS25.201 V3.4.0 S4.2, TS25.201 V3.4.0 S5.3, TS25.211 V3.12.0 S5, TS25.213 V3.9.0 S5.1, TS25.213 V3.9.0 S5.2, TS25.301 V3.11.0 S5.2.2, TS25.401 V3.10.0 S6, TS25.401 V3.10.0 S7.2, TS25.402 V3.10.0 S4.5 |
| BS, RNC, T | NTT DoCoMo | US 5673260 | | 09/02/2015 | METHOD AND SYSTEM FOR CDMA MOBILE COMMUNICATION | 1, 18, 23, 40 | TR21.905 V3.3.0 Macro Diversity Handover Def., TS25.201 V3.4.0 S4.1.1, TS25.201 V3.4.0 S4.2.1, TS25.201 V3.4.0 S4.2.3, TS25.201 V3.4.0 S5.3, TS25.211 V3.12.0 S5, TS25.211 V3.12.0 S5.3.3.3 Fig. 15, TS25.211 V3.12.0 S5.3.3.5 Fig. 18, TS25.213 V3.9.0 S4.3.1.1 Fig. 4, TS25.213 V3.9.0 S5.1, TS25.213 V3.9.0 S5.1 Fig. 8, TS25.213 V3.9.0 S5.2.1, TS25.213 V3.9.0 S5.2.2, TS25.213 V3.9.0 S5.2.3.2, TS25.213 V3.9.0 Table 4, TS25.301 V3.11.0 S5.2.2, TS25.301 V3.11.0 S5.2.2 Fig. 8, TS25.401 V3.10.0 S3.1 Def. of Cell and UTRAN AP, TS25.401 V3.10.0 S6, TS25.401 V5.2.0 S7.2.4.3, TS25.402 V3.10.0 S4.5 |
| BS, T | NTT DoCoMo | CN 95190181 | | 09/02/2015 | Method and System for CDMA Mobile Communication | 1, 18 | TS25.201 V5.3.0 S4.1.1, TS25.201 V5.3.0 S4.1.2, TS25.201 V5.3.0 S4.2.1, TS25.211 V5.8.0 S4.1, TS25.211 V5.8.0 S5, TS25.211 V5.8.0 S5.2.1, TS25.211 V5.8.0 S5.2.2.1.3, TS25.211 V5.8.0 S5.3.2, TS25.211 V5.8.0 S5.3.3.1, TS25.211 V5.8.0 S5.3.3.10, TS25.211 V5.8.0 S5.3.3.12, TS25.211 V5.8.0 S5.3.3.13, TS25.211 V5.8.0 S5.3.3.3, TS25.211 V5.8.0 S5.3.3.4, TS25.211 V5.8.0 S5.3.3.7, TS25.213 V5.6.0 Fig. 1, TS25.213 V5.6.0 Fig. 2, TS25.213 V5.6.0 Fig. 4, TS25.213 V5.6.0 Fig.8, TS25.213 V5.6.0 Figure 8, TS25.213 V5.6.0 S4.1, TS25.213 V5.6.0 S4.3.1.1, TS25.213 V5.6.0 S4.3.2.4, TS25.213 V5.6.0 S4.3.2.5, TS25.213 V5.6.0 S5.1, TS25.213 V5.6.0 S5.2.1, TS25.213 V5.6.0 S5.2.2, TS25.401 V5.10.0 S3.1, TS25.401 V5.10.0 S6 |
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|---|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 9 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | JP 3323424 | | 28/07/2017 | Downlink transmission power control scheme for mobile communication system and mobile communication system | 1, 26 | TS25.214 V5.0.0, TS25.302 V5.5.0, TS25.401 V5.2.0, TS25.427 V5.1.0, TS25.433 V5.0.0 |
| BS, RNC, T | NTT DoCoMo | US 5933782 | | 29/07/2017 | DOWNLINK TRANSMISSION POWER CONTROL SCHEME FOR MOBILE COMMUNICATION SYSTEM USING SITE DIVERSITY | 1, 26 | TS25.214 V3.12.0 S5.2, TS25.214 V3.12.0 S5.2.1.2, TS25.214 V3.12.0 S5.2.1.2.1, TS25.214 V3.12.0 S5.2.1.2.2, TS25.401 V3.10.0 S3.1, TS25.401 V3.10.0 S7.2.4.3, TS25.433 V3.14.2 S8.3.7.2, TS25.433 V3.14.2 S9.1.51, TS25.433 V4.13.0 S9.1.36.1, TS25.433 V4.13.0 S9.2.2.13C |
| BS, RNC, T | NTT DoCoMo | EP 0822672 | DE, FR, GB, IT, SE | 29/07/2017 | Downlink transmission power control scheme for mobile communication system using site diversity | 1, 26, 51, 71 | TS25.214 V3.12.0 S3, TS25.214 V3.12.0 S5.2, TS25.214 V3.12.0 S5.2.1.2.1, TS25.214 V3.12.0 S5.2.1.2.2, TS25.401 V3.10.0 S3.1, TS25.401 V3.10.0 S3.2, TS25.401 V3.10.0 S7.2.4.3, TS25.433 V3.14.2 Fig. 37, TS25.433 V3.14.2 S8.3.7, TS25.433 V3.14.2 S8.3.7.1, TS25.433 V3.14.2 S8.3.7.2, TS25.433 V3.14.2 S9.1.5.1 |
| BS, RNC, T | NTT DoCoMo | EP 1662675 | DE, FR, GB, IT, SE | 29/07/2017 | Downlink transmission power control scheme for mobile communication system using site diversity | 1, 31, 43 | TS25.214 V3.12.0 S5.2, TS25.214 V3.12.0 S5.2.1.2.1, TS25.214 V3.12.0 S5.2.1.2.2, TS25.401 V3.10.0 S3.1, TS25.401 V3.10.0 S3.1 Def. of Cell and UTRAN AP, TS25.401 V3.10.0 S7.2.4.3, TS25.433 V4.13.0 Figure 24, TS25.433 V4.13.0 S8.2.17.1, TS25.433 V4.13.0 S8.2.17.2, TS25.433 V4.13.0 S8.3.7.1, TS25.433 V4.13.0 S9.1.36.1, TS25.433 V4.13.0 S9.2.2.13C |
| BS, RNC, T | NTT DoCoMo | CA 2,211,925 | | 29/07/2017 | Downlink transmission power control scheme for mobile communication system using site diversity | 1, 26 | TS25.214 V5.11.0 S3, TS25.214 V5.11.0 S5.2, TS25.214 V5.11.0 S5.2.1.2, TS25.214 V5.11.0 S5.2.1.2.1, TS25.214 V5.11.0 S5.2.1.2.2, TS25.401 V5.10.0 S3.1, TS25.401 V5.10.0 S3.2, TS25.401 V5.10.0 S7.2.4.3, TS25.433 V5.16.0 Fig. 37, TS25.433 V5.16.0 S8.3.7.1, TS25.433 V5.16.0 S8.3.7.2, TS25.433 V5.16.0 S9.1.51, TS25.433 V5.16.0 S9.2.2.13C |
| BS, RNC, T | NTT DoCoMo | CN 97115469 | | 29/07/2017 | Downlink transmission power control scheme for mobile communication system using site diversity. | 1, 26 | TS25.214 V3.12.0 S5.2, TS25.214 V3.12.0 S5.2.1.2.1, TS25.214 V3.12.0 S5.2.1.2.2, TS25.401 V3.10.0 S3.1, TS25.401 V3.10.0 S7.2.4.3, TS25.433 V3.14.2 Fig. 37, TS25.433 V3.14.2 S8.3.7.2, TS25.433 V3.14.2 S9.1.51, TS25.433 V4.13.0 S9.1.36.1, TS25.433 V4.13.0 S9.2.2.13C |
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|--|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 10 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | JP 3409628 | | 27/03/2017 | CDMA communication method and group spreading modulator | 1, 4, 14 | TS25.201 V5.0.0 S4, TS25.211 V5.0.0 S5, TS25.212 V5.0.0 S4, TS25.213 V5.0.0 S4, TS25.213 V5.0.0 S5 |
| BS, RNC, T | NTT DoCoMo | CA 2208085 | | 16/06/2017 | CDMA Communication Method and Group Spreading Modulator. | 1 | TS25.201 V3.4.0 S4.2.1, TS25.211 V3.12.0 Fig. 1, TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3.2, TS25.211 V3.12.0 Table 1, TS25.211 V3.12.0 Table 11, TS25.212 V3.11.0 Annex A.1.2, TS25.212 V3.11.0 Fig. A.1, TS25.213 V3.9.0 Figure 4, TS25.213 V3.9.0 S4.1, TS25.213 V3.9.0 S4.3.1.1, TS25.213 V3.9.0 S5.2.1 |
| 11 | | | | | | | |
| CN, RNC, T | Mitsubishi | JP 2905155 | | 23/04/2010 (Expired) | Voice coding apparatus used to digitally transmit or store voice | 1 | TS26.073 ANSI-C_source_code, TS26.073 V3.3.0 Table 1, TS26.090 V3.1.0 S4.3, TS26.090 V3.1.0 S5.2 |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

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|---|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 12 | | | | | | | |
| CN, RNC, T | Siemens | CN 131517 | | 31/05/2020 | Method and System for Verifying the Authenticity of a first Communication Participant in a Communications network | 1, 5 | TS33.102 V4.4.0 |
| BS, CN, RNC, T | Siemens | JP 3924465 | | 31/05/2020 | Authenticity verification for communication network subscriber e.g. for mobile radio system | 1, 4 | TS33.102 V4.4.0 C.1.1.1, TS33.102 V4.4.0 C.2.2, TS33.102 V4.4.0 Figure 10, TS33.102 V4.4.0 Figure 4, TS33.102 V4.4.0 Figure 7, TS33.102 V4.4.0 Figure 9, TS33.102 V4.4.0 S3.2, TS33.102 V4.4.0 S3.3, TS33.102 V4.4.0 S6.2, TS33.102 V4.4.0 S6.3.1, TS33.102 V4.4.0 S6.3.2, TS33.102 V4.4.0 S6.3.3 |
| BS, CN, RNC, T | Siemens | AU 760714 | | 22/05/2020 | Method and system for verifying the authenticity of a first communication participant in a communications network. | 1, 5 | TS33.102 V4.4.0 Figure 7, TS33.102 V4.4.0 Figure 9, TS33.102 V4.4.0 S6.3.1, TS33.102 V4.4.0 S6.3.2, TS33.102 V4.4.0 S6.3.3 |
| BS, CN, RNC, T | Siemens | EP 1186193 | DE, ES, FR, GB, IT | 31/05/2020 | Method and system for verifying the authenticity of a first communication participant in a communications network | 1, 5 | TS33.102 V4.4.0 C.1.1.1, TS33.102 V4.4.0 Figure 7, TS33.102 V4.4.0 Figure 9, TS33.102 V4.4.0 S3.2, TS33.102 V4.4.0 S3.3, TS33.102 V4.4.0 S6.3.1, TS33.102 V4.4.0 S6.3.2, TS33.102 V4.4.0 S6.3.3 |
| BS, CN, RNC, T | Siemens | US 6980796 | | 12/07/2021 | Method and system for verifying the authenticity of a first communication participant in a communications network. | 1, 7 | TS33.102 V4.4.0 C.1.1.1, TS33.102 V4.4.0 Figure 10, TS33.102 V4.4.0 Figure 7, TS33.102 V4.4.0 Figure 9, TS33.102 V4.4.0 S3.2, TS33.102 V4.4.0 S3.3, TS33.102 V4.4.0 S6.3.1, TS33.102 V4.4.0 S6.3.2, TS33.102 V4.4.0 S6.3.3 |
| BS, CN, RNC, T | Siemens | IN 202625 | | 31/05/2020 | Method and device for verifying the authenticity of a first communication subscriber in a communications network. | 1, 5 | TS33.102 V4.4.0 C.1.1.1, TS33.102 V4.4.0 Figure 7, TS33.102 V4.4.0 Figure 9, TS33.102 V4.4.0 S3.2, TS33.102 V4.4.0 S3.3, TS33.102 V4.4.0 S6.3.1, TS33.102 V4.4.0 S6.3.2, TS33.102 V4.4.0 S6.3.3 |
| BS, CN, RNC, T | Siemens | EP 1326469 | DE, ES, FR, GB, IT | 31/05/2020 | Method and device for checking the authenticity of service provider in a communications network | 1, 9 | TS33.102 V4.4.0 C.1.1.1, TS33.102 V4.4.0 Figure 12, TS33.102 V4.4.0 Figure 5, TS33.102 V4.4.0 Figure 7, TS33.102 V4.4.0 Figure 9, TS33.102 V4.4.0 S3.2, TS33.102 V4.4.0 S3.3, TS33.102 V4.4.0 S6.3.1, TS33.102 V4.4.0 S6.3.2, TS33.102 V4.4.0 S6.3.3, TS33.102 V4.4.0 S6.3.5 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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|---|--------------------------------|----------------------|---|---|---|-------------------------|--|
| BS, CN, RNC, T | Siemens | JP 4272920 | | 31/05/2020 | Method and device for checking the authenticity of a first communication participant in a communications network. | 1, 10 | TS33.102 V4.4.0 Figure 12, TS33.102 V4.4.0 Figure 5, TS33.102 V4.4.0 Figure 7, TS33.102 V4.4.0 Figure 9, TS33.102 V4.4.0 S3.3, TS33.102 V4.4.0 S6.3.1, TS33.102 V4.4.0 S6.3.2, TS33.102 V4.4.0 S6.3.3, TS33.102 V4.4.0 S6.3.5 |
| BS, CN, RNC, T | Siemens | KR 576956 | | 31/05/2020 | Method and device for checking the authenticity of a service provider in a communications network. | 1, 11 | TS33.102 V4.4.0 C.1.1.1, TS33.102 V4.4.0 Figure 12, TS33.102 V4.4.0 Figure 5, TS33.102 V4.4.0 Figure 7, TS33.102 V4.4.0 Figure 9, TS33.102 V4.4.0 S3.3, TS33.102 V4.4.0 S6.3.1, TS33.102 V4.4.0 S6.3.2, TS33.102 V4.4.0 S6.3.3, TS33.102 V4.4.0 S6.3.5 |
| 13 | | | | | | | |
| CN, T | Siemens | JP 2977154 | | 22/08/2017 | Method and system to localize a subscriber in a cellular mobile communication network | 1, 10 | TS23.018 V4.6.0 S8.3.1, TS23.018 V4.6.0 S8.3.2, TS23.079 V4.1.0 S10.3.1, TS23.079 V4.1.0 S4.1, TS23.079 V4.1.0 S5.1 |
| CN, T | Siemens | CN 88486 | | 02/09/2017 | Method and System for Determining the Location of a Subscriber Registered in a Mobile Communication Network | 1, 10 | TS23.018 V4.6.0 S8.3.1, TS23.018 V4.6.0 S8.3.2, TS23.079 V4.1.0 S1, TS23.079 V4.1.0 S10.3.1, TS23.079 V4.1.0 S4.1, TS23.079 V4.1.0 S5.1 |
| CN, T | Siemens | DE 19635581C1 | | 02/09/2016 | Method and System for Determining the Location of a Subscriber Registered in a Mobile Communication Network | 1, 10 | TS23.018 V4.6.0 S8.2.1, TS23.018 V4.6.0 S8.3.1, TS23.018 V4.6.0 S8.3.2, TS23.079 V4.1.0 S1, TS23.079 V4.1.0 S10.3.1, TS23.079 V4.1.0 S4.1, TS23.079 V4.1.0 S5, TS23.079 V4.1.0 S5.1 |
| CN, T | Siemens | US 6035198 | | 02/09/2017 | Method and System for Determining the Location of a Subscriber Registered in a Mobile Communication Network | 1, 11 | TS23.018 V4.6.0 S8, TS23.018 V4.6.0 S8.3.1, TS23.018 V4.6.0 S8.3.2, TS23.079 V4.1.0 S1, TS23.079 V4.1.0 S10, TS23.079 V4.1.0 S10.3.1, TS23.079 V4.1.0 S4.1, TS23.079 V4.1.0 S5, TS23.079 V4.1.0 S5.1 |
| CN, T | Siemens | EP 0827355B1 | DE, ES, FR, GB, IT | 07/08/2017 | Method and system for locating a mobile subscriber registered in a cellular mobile radio network | 1, 10 | TS23.018 V4.6.0 S8.2.1, TS23.018 V4.6.0 S8.3.1, TS23.018 V4.6.0 S8.3.2, TS23.079 V4.1.0 Fig. 3, TS23.079 V4.1.0 S1, TS23.079 V4.1.0 S10.3.1, TS23.079 V4.1.0 S4.1, TS23.079 V4.1.0 S5, TS23.079 V4.1.0 S5.1 |
| 14 | | | | | | | |
| CN, RNC | NTT DoCoMo | JP 2942162 | | 05/01/2015 | Method for Mobile Packet Communication | 1 | TS23.060 V5.0.0, TS23.221 V5.2.0, TS25.323 V5.0.0 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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|--|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 15 | | | | | | | |
| CN, RNC, T | NTT DoCoMo | JP 3323421 | | 19/06/2017 | Mobile Communication System for Supporting Multiple Simultaneous Communications on Single Mobile Terminal | 11, 18 | TS22.135 V5.0.0 S4, TS24.007 V5.1.0 S10.1, TS24.007 V5.1.0 S11.2.3.1.3, TS24.007 V5.1.0 S4.1, TS24.007 V5.1.0 S5, TS24.007 V5.1.0 S5.2, TS24.007 V5.1.0 S6, TS24.007 V5.1.0 S6.2, TS24.007 V5.1.0 S9.1, TS24.008 V5.5.0 S10.5.4.28, TS24.008 V5.5.0 S4.1, TS24.135 V5.0.0 S4.1, TS24.135 V5.0.0 S4.1.1, TS25.331 V5.0.0 S13.4.5, TS25.331 V5.0.0 S13.4.5.8, TS25.331 V5.0.0 S5.1, TS25.331 V5.0.0 S8.5.5, TS25.331 V5.0.0 S8.5.5.1.2, TS25.331 V5.0.0 S8.5.5.4, TS25.413 V5.0.0 S8.3.1, TS25.413 V5.0.0 S8.3.2, TS25.413 V5.0.0 S8.4.1, TS25.413 V5.0.0 S9.1.5, TS25.413 V5.0.0 S9.2.1.2 |
| CN, RNC, T | NTT DoCoMo | US 6314300 | | 20/06/2017 | MOBILE COMMUNICATION SYSTEM FOR SUPPORTING MULTIPLE SIMULTANEOUS COMMUNICATIONS ON SINGLE MOBILE TERMINAL | 11, 18 | TS22.135 V5.0.0 S4, TS24.007 V5.1.0 S10.1, TS24.007 V5.1.0 S11.2.3.1.3, TS24.007 V5.1.0 S4.1, TS24.007 V5.1.0 S5, TS24.007 V5.1.0 S5.2, TS24.007 V5.1.0 S6, TS24.007 V5.1.0 S6.2, TS24.007 V5.1.0 S9.1, TS24.008 V5.5.0 S10.5.4.28, TS24.008 V5.5.0 S4.1, TS24.135 V5.0.0 S4.1, TS24.135 V5.0.0 S4.1.1, TS25.331 V3.10.0 S5.1, TS25.331 V3.10.0 S8.5.5, TS25.331 V3.10.0 S8.5.5.1.2, TS25.331 V3.10.0 S8.5.5.4, TS25.331 V5.0.0 S13.4.5, TS25.413 V5.0.0 S8.3.1, TS25.413 V5.0.0 S8.3.2, TS25.413 V5.0.0 S8.4.1, TS25.413 V5.0.0 S9.1.5, TS25.413 V5.0.0 S9.2.1.2 |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

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|--|--------------------------------|----------------------|---|---|---|-------------------------|---|
| CN, RNC, T | NTT DoCoMo | EP 0814626 | DE, GB, SE | 20/06/2017 | Mobile Communication System for Supporting Multiple Simultaneous Communications on Single Mobile Terminal | 1 | TS23.135 V3.2.0 S4.2.1 Fig 5, TS23.135 V3.2.0 S4.2.1 Fig. 5, TS24.007 V3.10.0 Annex A, TS24.007 V3.10.0 S10.1, TS24.007 V3.10.0 S10.1 Fig. 10.1, TS24.007 V3.10.0 S11.2.3.1.3, TS24.007 V3.10.0 S4.1, TS24.007 V3.10.0 S5.2, TS24.007 V3.10.0 S5.2 Fig. 5.1, TS24.007 V3.10.0 S6, TS24.007 V3.10.0 S6.2, TS24.007 V3.10.0 S7.1, TS24.007 V3.10.0 S7.1.2, TS24.007 V3.10.0 S7.1.2.1, TS24.007 V3.10.0 S9.1, TS24.008 V3.19.0 S10.5.4.28, TS24.008 V3.19.0 S4.1, TS24.008 V3.19.0 S5.1.1, TS24.008 V3.19.0 S5.2.1.9, TS24.135 V3.2.0 S4.1, TS24.135 V3.2.0 S4.1.1, TS25.331 V3.21.0 S10.3.1.14, TS25.331 V3.21.0 S10.3.4.8, TS25.331 V3.21.0 S13.4.5, TS25.331 V3.21.0 S8.5.5, TS25.331 V3.21.0 S8.5.5.1.2, TS25.331 V3.21.0 S8.5.5.4, TS25.413 V3.14.0 S8.3.1, TS25.413 V3.14.0 S8.3.2, TS25.413 V3.14.0 S9.1.5, TS25.413 V3.14.0 S9.2.1.2 |
| 16 | BS, CN, RNC, T | Siemens | US 4843612 | 27/06/2006 (Expired) | Method for jam-resistant communication transmission | 1 | TS26.093 V4.0.0 |
| 17 | CN | Siemens | US 6415151 | 02/07/2019 | Packet data service handling method especially for GSM interworking of packet data service with network functions of intelligent network and interconnecting service switching function with service network node | 1, 15 | TS22.078 V3.2.0, TS23.078 V3.10.0, TS29.078 V3.10.0 |
| 18 | BS, RNC | Siemens | EP 868 823 B1 | ES, FR, GB, IT 02/12/2016 | Information transmission system for universal transmission network has selected combination points for each 2 redundant transmission paths used as conversion points for conversion between mobile radio network and stationary network codings | 1 | TS25.303 V5.1.0 S6.4.8.3, TS25.331 V5.7.1 S14.12.2, TS25.401 V5.7.0 S7.2.3.2, TS25.420 V5.1.0 S4.5.1.3, TS25.420 V5.1.0 S4.5.1.4, TS25.420 V5.1.0 S5.2.2 |
| 19 | BS, CN, RNC, T | Mitsubishi | JP 2659605 | 23/04/2010 (Expired) | Voice decoding apparatus and voice coding/decoding apparatus | 1, 3 | TS26.073 V3.3.0, TS26.090 V3.1.0 |

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|---|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 20 | | | | | | | |
| BS, T | Mitsubishi | JP 3394506 | | 17/04/2013 | Sound discrimination apparatus and sound discrimination method | 1, 2 | TS26.094 V3.0.0 |
| 21 | | | | | | | |
| BS, T | Siemens | EP 1232583 | DE, FR, GB, IT | 24/11/2020 | A METHOD FOR DISPLAYING FORMAT IDENTIFIER BITS IN A COMPRESSED MODE FRAME | 1, 6 | TS25.212 V4.4.0 S4 |
| BS, RNC, T | Siemens | JP 3787524 | | 31/03/2026 | Method for Representing non-transmitted DTX bits in a frame to be sent in compressed mode | 1, 6 | TS25.211 V4.4.0 S5.3.2, TS25.211 V4.4.0 Table 11, TS25.212 V4.4.0 Figure 11, TS25.212 V4.4.0 S4.2.9, TS25.212 V4.4.0 S4.3.3, TS25.212 V4.4.0 S4.3.5.2, TS25.212 V4.4.0 S4.3.5.2.2, TS25.212 V4.4.0 S4.4, TS25.212 V4.4.0 S4.4.3 |
| 22 | | | | | | | |
| BS, T | Siemens | EP 1232584 | DE, FR, GB, IT | 24/11/2020 | A METHOD FOR DISPLAYING FORMAT IDENTIFIER BITS IN A COMPRESSED MODE FRAME | 1, 6 | TS25.211 V4.4.0 S4, TS25.212 V4.4.0 S4 |
| T | Siemens | JP 3762892 | | 24/11/2020 | Method for representing format indicator bits in a frame to be sent in compressed mode | 1 | TS25.211 V4.4.0 S5.3.1, TS25.211 V4.4.0 S5.3.2, TS25.211 V4.4.0 Table 11, TS25.211 V4.4.0 Table 2, TS25.212 V4.4.0 Fig 11, TS25.212 V4.4.0 S4.3.3, TS25.212 V4.4.0 S4.3.5.2, TS25.212 V4.4.0 S4.3.5.2.1, TS25.212 V4.4.0 S4.3.5.2.2, TS25.212 V4.4.0 S4.4, TS25.212 V4.4.0 S4.4.3 |
| T | Siemens | US 7200136 | | 22/05/2022 | Method for mapping format identification bits onto a frame which is to be transmitted using a compressed mode | 1 | TS25.211 V4.4.0 S5.2.1, TS25.211 V4.4.0 Table 1, TS25.211 V4.4.0 Table 2, TS25.212 V4.4.0 Fig 11, TS25.212 V4.4.0 S4.3.3, TS25.212 V4.4.0 S4.3.5.2, TS25.212 V4.4.0 S4.3.5.2.1, TS25.212 V4.4.0 S4.3.5.2.2, TS25.212 V4.4.0 S4.4, TS25.212 V4.4.0 S4.4.3 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|--|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 23 | | | | | | | |
| BS, T | Mitsubishi | EP 1077576B1 | DE, FR, GB | 28/07/2020 | Method for configuring a telecommunication system | 1, 23, 26, 27 | TS25.212 V3.11.0 |
| BS, T | Mitsubishi | CN ZL00126013.8 | | 18/08/2020 | Method for configuring a telecommunication system | 1, 4, 7, 9 | TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.7.2, TS25.212 V3.11.0 S4.2.7.2.1, TS25.302 V3.16.0 S7.1.8 |
| BS, T | Mitsubishi | US 7012894B2 | | 05/06/2021 | Method for configuring a telecommunication system | 1, 11, 16 | TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.7.2, TS25.212 V3.11.0 S4.2.7.2.1, TS25.302 V3.3.0 S7.1.8, TS25.302 V3.3.0 S7.1.9 |
| BS, T | Mitsubishi | JP 3768501 | | 18/08/2020 | A communication method of a telecommunication system, a telecommunication system, a communication method of a base station and a base station in a telecommunication system | 1, 2, 3, 4 | TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 S3.3, TS25.212 V3.11.0 S4.1, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.7.2, TS25.212 V3.11.0 S4.2.7.2.1 |
| 24 | | | | | | | |
| BS, T | Mitsubishi | US 6510137 | | 21/08/2020 | Method for Configuring a Telecommunication System | 1, 12 | TS25.212 V3.11.0, TS25.302 V3.3.0 |
| BS, T | Mitsubishi | JP 3577076 | | 16/12/2023 | Method for configuring a telecommunication system | 1, 3, 6, 7 | TS25.212 V3.11.0 |
| BS, T | Mitsubishi | CN 100367691C | | 18/08/2020 | Method for configuring a telecommunication system | 1, 4, 5, 6, 7 | TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 S3.3, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.7.2, TS25.212 V3.11.0 S4.2.7.2.1 |
| 25 | | | | | | | |
| BS, CN, RNC, T | Mitsubishi | JP 3483958 | | 28/10/2014 | A wideband speech reconstruction method and apparatus which reconstructs speech signals from a band limited narrowband speech narrowband signal or a narrowband speech code that is coded narrowband speech signal | 9, 15 | TS26.190 V5.1.0 |

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|---|--------------------------------|----------------------|--|---|---|-------------------------|--|
| 26 | | | | | | | |
| CN | KPN | EP 421535B1 | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE | 01/10/2010 | Method for transferring, between two switching exchanges for mobile services, the handling of an active connection with a mobile terminal | 1 | TS23.002 V3.6.0, TS23.002 V4.5.0, TS23.002 V5.8.0, TS23.060 V3.13.0, TS23.060 V4.6.0, TS23.060 V5.3.0 |
| CN | KPN | JP 2535251 | | 19/09/2010 | Method for transferring, between two switching exchanges for mobile services, the handling of an active connection with a mobile terminal | 1 | TS23.002 V3.6.0 S3.1, TS23.002 V3.6.0 S3.12, TS23.002 V3.6.0 S3.5, TS23.002 V3.6.0 S3.9, TS23.002 V3.6.0 S4.1.3, TS23.002 V3.6.0 S4.1.3.1, TS23.002 V3.6.0 S4.2, TS23.002 V3.6.0 S4.2.1, TS23.002 V3.6.0 S4.2.1.2, TS23.002 V3.6.0 S4.3, TS23.002 V3.6.0 S6.3.1, TS23.002 V3.6.0 S6.4.2.2, TS23.002 V3.6.0 S7.2, TS23.060 V3.13.0 S14.7, TS23.060 V3.13.0 S15.1, TS23.060 V3.13.0 S4, TS23.060 V3.13.0 S4.1, TS23.060 V3.13.0 S5.3.4, TS23.060 V3.13.0 S5.4.1, TS23.060 V3.13.0 S5.5 tab. 1, TS23.060 V3.13.0 S5.6.1.1, TS23.060 V3.13.0 S5.6.1.2 Fig. 5, TS23.060 V3.13.0 S6.1.1.3, TS23.060 V3.13.0 S6.8.1, TS23.060 V3.13.0 S6.8.4 Fig. 31, TS23.060 V3.13.0 S6.9.1, TS23.060 V3.13.0 S6.9.1.1, TS23.060 V3.13.0 S6.9.1.2, TS23.060 V3.13.0 S6.9.1.2.2 Fig. 33, TS23.060 V3.13.0 S8.1.3.1., TS23.060 V3.13.0 S9.1.1, TS23.060 V3.13.0 S9.1.2, TS23.060 V3.13.0 S9.2 |
| 27 | | | | | | | |
| BS, RNC, T | KPN | EP 475520B1 | AT, BE, CH, DE, DK, ES, FR, GB, LI, NL, SE | 06/09/2011 | Method for coding an analog signal having a repetitive nature and a device for coding by said method | 4 | TS26.090 V3.1.0 |
| BS, RNC, T | KPN | JP 2640595 | | 10/09/2011 | Method for coding an analog signal having a repetitive nature and a device for coding by said method | 4 | TS26.090 V3.1.0 S1, TS26.090 V3.1.0 S3.1, TS26.090 V3.1.0 S4.2, TS26.090 V3.1.0 S5.2, TS26.090 V3.1.0 S5.3, TS26.090 V3.1.0 S5.7.2 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 28 | | | | | | | |
| CN | NTT DoCoMo | JP 2873405 | | 06/02/2016 | Mobile Communication System and Communication Networks | 10 | TS23.119 V5.0.0, TS23.221 V5.0.0 |
| CN | NTT DoCoMo | EP 0756433 | DE, GB, SE | 06/02/2016 | Mobile Communication System and Communication Network | 1, 7 | TS23.002 V3.6.0 S3, TS23.002 V3.6.0 S3.8, TS23.002 V3.6.0 S3.9, TS23.012 V3.3.0 S1, TS23.012 V3.3.0 S2, TS23.012 V3.3.0 S2.1, TS23.012 V3.3.0 S2.2, TS23.012 V3.3.0 S3.4, TS23.012 V3.3.0 S3.6, TS23.012 V3.3.0 S3.6.1.2, TS23.012 V3.3.0 S4.1.1.1 Fig. 4.1.1.1 Sh.1/3, TS23.012 V3.3.0 S4.1.2.1 Fig. 4.1.2.1 Sh.1/4, TS23.012 V3.3.0 S4.1.2.1 Fig. 4.1.2.1 Sh.2/4, TS23.012 V3.3.0 S4.1.2.1 Fig. 4.1.2.1 Sh.4/4, TS23.012 V3.3.0 S4.1.2.5 Fig. 4.1.2.5 Sh. 1/1, TS23.012 V3.3.0 S4.1.3.2 Fig. 4.1.3.2 Sh. 1/2, TS23.060 V3.16.0 S13.1 Tab. 5, TS23.060 V3.16.0 S3, TS23.060 V3.16.0 S3.1, TS23.060 V3.16.0 S3.3, TS23.060 V3.16.0 S4, TS23.060 V3.16.0 S5.4 Fig. 2, TS23.060 V3.16.0 S5.4.1, TS23.060 V3.16.0 S6, TS23.060 V3.16.0 S6.1, TS23.060 V3.16.0 S6.9.2.1 Fig. 36, TS23.119 V3.0.0 S4, TS23.119 V3.0.0 S5 Fig. 1, TS23.119 V3.0.0 S5.2 Fig. 5.2/1, TS23.119 V3.0.0 S5.3 Fig. 5.3/1, TS23.119 V3.0.0 S5.4 Fig. 5.4/1, TS23.119 V3.0.0 S5.5 Fig. 5.5/1, TS23.119 V3.0.0 S6, TS23.119 V3.0.0 S6 Fig. 6/1, TS23.119 V3.0.0 S6.1, TS23.119 V3.0.0 S7.2.1.1.1 Fig. 7.2/1, TS23.119 V3.0.0 S7.2.1.1.2 Fig. 7.2/2, TS23.119 V3.0.0 S7.3, TS23.119 V3.0.0 S7.3.1, TS23.119 V3.0.0 S7.3.1.1 Fig. 7.3/1, TS23.119 V3.0.0 S7.3.1.3 Fig. 7.3/3, TS23.119 V3.0.0 S7.3.1.4 Fig. 7.3/4, TS23.119 V3.0.0 S7.3.4 Fig. 7.3/12, TS23.119 V3.0.0 S8.6 Tab. 8.5/1, TS23.121 V3.6.0 S4.3.8.1, TS24.008 V3.19.0 S4.2.2.1, TS24.008 V3.19.0 S4.7.5, TS24.008 V3.19.0 S4.7.5.1 |
| 29 | | | | | | | |
| CN | NTT DoCoMo | JP 3291131 | | 15/07/2014 | Mobile Communication System | 1 | TS23.003 V3.13.0 S3, TS23.012 V3.3.0 S2, TS23.012 V3.3.0 S3, TS23.018 V3.12.0 S4, TS23.018 V3.12.0 S5, TS23.018 V3.12.0 S7, TS29.002 V3.18.0 S8 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|--|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 30 | | | | | | | |
| BS, T | NTT DoCoMo | JP 2688686 | | 03/03/2014 | Random access communication method by use of 4 CDMA, and system for mobile stations which use the method | | TS25.211 V5.0.0, TS25.213 V5.0.0, TS25.214 V5.0.0 |
| BS, T | NTT DoCoMo | EP 1298817B1 | DE, GB, SE | 03/03/2014 | Random access communication method by use of 1, 5 CDMA, and system for mobile stations which use the method | | TS25.201 V3.4.0 S4, TS25.201 V3.4.0 S4.2, TS25.211 V3.12.0 S5, TS25.211 V3.12.0 S5.2.2.1, TS25.211 V3.12.0 S5.2.2.1.1, TS25.211 V3.12.0 S7, TS25.211 V3.12.0 S7.3, TS25.213 V3.9.0 S4, TS25.213 V3.9.0 S4.3.3.1, TS25.214 V3.12.0 S4, TS25.214 V3.12.0 S4.2, TS25.214 V3.12.0 S6, TS25.214 V3.12.0 S6.1 |
| BS, T | NTT DoCoMo | US 5581547 | | 03/03/2014 | Random access communication method by CDMA and mobile station equipment using the same | 16, 19, 22, 24 | TS25.201 V5.0.0 S4, TS25.201 V5.0.0 S4.2, TS25.201 V5.0.0 S4.2.1, TS25.211 V5.0.0 S5, TS25.211 V5.0.0 S5.2, TS25.211 V5.0.0 S5.2.2, TS25.211 V5.0.0 S5.2.2.1, TS25.211 V5.0.0 S5.2.2.1.1, TS25.211 V5.0.0 S7.3, TS25.213 V5.5.0 S4, TS25.213 V5.5.0 S4.3, TS25.213 V5.5.0 S4.3.3, TS25.213 V5.5.0 S4.3.3.1, TS25.213 V5.5.0 S4.3.3.2, TS25.214 S4.1, TS25.214 S6.1.2, TS25.214 V5.0.0 S4.2, TS25.214 V5.0.0 S6, TS25.214 V5.0.0 S6.1 |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

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|---|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 31 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | JP 2855171 | | 27/12/2015 | Device and method for initially synchronizing spread-spectrum code of CDMA transmission system | 1, 8, 24, 25 | TS25.201 V3.4.0, TS25.211 V3.12.0, TS25.213 V3.8.0, TS25.214 V3.12.0, TS25.301 V3.11.0 |
| BS, RNC, T | NTT DoCoMo | EP 0749223 | DE, FR, GB, IT, SE | 27/12/2015 | DEVICE AND METHOD FOR INITIALLY SYNCHRONIZING SPREADSPECTRUM CODE OF CDMA TRANSMISSION SYSTEM | 1, 8, 24, 25 | TS25.201 V3.4.0 S4.1.1, TS25.201 V3.4.0 S4.2.1, TS25.211 V3.12.0 S5.3.3.3, TS25.211 V3.12.0 S5.3.3.5, TS25.213 V3.9.0 S5.1, TS25.213 V3.9.0 S5.2.2, TS25.213 V3.9.0 S5.2.3.2, TS25.213 V3.9.0 S5.3.2, TS25.213 V5.4.0 S5.1, TS25.214 V3.12.0 Annex C, TS25.301 V3.11.0 S5.2.2 |
| BS, RNC, T | NTT DoCoMo | US 5914943 | | 27/12/2015 | APPARATUS AND METHOD FOR ESTABLISHING ACQUISITION OF SPREADING CODE IN CDMA TRANSMISSION SYSTEM | 1, 8, 24, 25 | TS25.201 V3.4.0 S4.1.1, TS25.201 V3.4.0 S4.2.1, TS25.211 V3.12.0 Fig. 15, TS25.211 V3.12.0 Fig. 18, TS25.211 V3.12.0 S5.3.3.3, TS25.211 V3.12.0 S5.3.3.5, TS25.213 V3.8.0 Fig. 10, TS25.213 V3.8.0 Fig. 11, TS25.213 V3.8.0 Fig. 8, TS25.213 V3.8.0 Fig. 9, TS25.213 V3.8.0 S5.1, TS25.213 V3.8.0 S5.2.2, TS25.213 V3.8.0 S5.2.3.2, TS25.213 V3.8.0 S5.3.2, TS25.214 V3.12.0 Annex C, TS25.301 V3.11.0 Fig. 10, TS25.301 V3.11.0 S5.2.2 |
| BS, RNC, T | NTT DoCoMo | CA 2,184,184 | | 27/12/2027 | Apparatus and Method for Establishing Acquisition of Spreading Code in CDMA Transmission System | 1, 8, 24, 25 | TS25.201 V5.3.0 S4.1.1, TS25.201 V5.3.0 S4.2.1, TS25.211 V5.8.0 Figure 15, TS25.211 V5.8.0 Figure 18, TS25.211 V5.8.0 S5.3.3.3, TS25.211 V5.8.0 S5.3.3.5, TS25.213 V5.6.0 Fig.8, TS25.213 V5.6.0 Figure 10, TS25.213 V5.6.0 Figure 11, TS25.213 V5.6.0 Figure 9, TS25.213 V5.6.0 S5.1, TS25.213 V5.6.0 S5.2.2, TS25.213 V5.6.0 S5.2.3.2, TS25.213 V5.6.0 S5.3.2, TS25.213 V5.6.0 Table 4, TS25.214 V5.11.0 Annex C, TS25.301 V5.6.0 S5.2.2 |
| 32 | | | | | | | |
| BS, RNC | NTT DoCoMo | JP 3003839 | | 25/10/2014 | CDMA communication method and apparatus | 1, 10 | TS25.201 V3.4.0 S4.2.1, TS25.201 V3.4.0 S5.3, TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 S4.2.12.2, TS25.212 V3.11.0 S4.2.9, TS25.212 V3.11.0 S4.2.9.1, TS25.212 V3.11.0 S4.2.9.2, TS25.213 V3.8.0 Fig. 11, TS25.213 V3.8.0 Fig. 8, TS25.213 V3.8.0 S5.1, TS25.213 V3.8.0 S5.3.2 |
| 33 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | JP 3313595 | | 14/11/2016 | Pilot channel transmitting method in CDMA mobile communication system | 3 | TS25.201 V5.0.0, TS25.211 V5.0.0, TS25.212 V5.0.0, TS25.213 V5.0.0, TS25.214 V5.0.0, TS25.331 V5.0.0, TS25.401 V5.2.0 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 34 | | | | | | | |
| BS, CN, RNC, T | NEC | CN 99105453.9 | | 07/04/2019 | Power control method and system using idle time in mobile communication system | 19, 57, 94, 121 | TS25.212 V3.11.0, TS25.214 V3.12.0 |
| BS, CN, RNC, T | NEC | JP 3534060 | | 02/11/2018 | Mobile communication system, communication control method and base station used in mobile communication system | 1, 15, 29 | TS25.212 V3.11.0 Fig. 11, TS25.212 V3.11.0 Fig. 13, TS25.212 V3.11.0 Fig. 14, TS25.212 V3.11.0 S4.4, TS25.212 V3.11.0 S4.4.2, TS25.212 V3.11.0 S4.4.3, TS25.212 V3.11.0 S4.4.4, TS25.214 V3.12.0 S3.3, TS25.214 V3.12.0 S5.1.2.2.1, TS25.331 V3.21.0 S8.4.0 |
| BS, CN, RNC, T | NEC | US 7203208 | | 06/04/2019 | Mobile communication system, communication control method and, base station and mobile station to be employed in the same | 10, 27, 42 | TS25.212 V3.11.0 Fig. 11, TS25.212 V3.11.0 Fig. 13, TS25.212 V3.11.0 S3.1, TS25.212 V3.11.0 S3.3, TS25.212 V3.11.0 S4.4, TS25.212 V3.11.0 S4.4.2, TS25.212 V3.11.0 S4.4.3, TS25.214 V3.12.0 S5.1.2.2.1, TS25.215 V3.13.0 S6.1.1.1 |
| 35 | | | | | | | |
| BS, CN, RNC, T | NEC | EP 1058471B1 | DE, FR | 30/05/2020 | Mobile Telecommunication System | 1, 7 | TS25.331 V3.18.0 S8.3.6 |
| 36 | | | | | | | |
| BS, RNC, T | NEC | JP 2991185 | | 02/06/2018 | Cellular communication system with soft handover and apparatus therefor | 7, 13 | TS25.101 V3.17.0, TS25.133 V3.17.0, TS25.201 V3.4.0, TS25.211 V3.12.0, TS25.214 V3.12.0 |
| BS, RNC, T | NEC | KR 362074 | | 09/06/2018 | Cellular communication system with soft handover and apparatus thereof | 7, 13 | TS25.201 V3.4.0 S4.2.1, TS25.211 V3.12.0 S5.2.1, TS25.214 V3.12.0 S5.2.1.4 |
| 37 | | | | | | | |
| BS, RNC, T | NEC | JP 3047393 | | 16/02/2018 | Base Station transmission power control during soft handover, mobile station and base station | 22, 23 | TS25.133 V3.17.0 S5.1.1, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3.3.1, TS25.214 V3.12.0 Annex B.2, TS25.214 V3.12.0 S5.2.1.2.1, TS25.214 V3.12.0 S5.2.1.4.1.1, TS25.214 V3.12.0 S5.2.1.4.2, TS25.214 V3.12.0 S5.2.1.4.3, TS25.214 V3.12.0 S5.2.1.4.4, TS25.214 V3.12.0 S5.2.1.4.5, TS25.214 V3.12.0 Table 5, TS25.214 V3.12.0 Table 6 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 38 | | | | | | | |
| BS, T | NEC | JP 3109589 | | 18/03/2018 | Method and apparatus for adjusting transmission power of a CDMA terminal | 1, 9 | TS25.201 V3.4.0, TS25.213 V3.9.0, TS25.214 V3.12.0 |
| BS, T | NEC | EP 0944182 | | 16/03/2019 | Method and apparatus for adjusting transmission power of a CDMA terminal | 1, 9 | TS25.201 V3.4.0 S4.2.1, TS25.213 V3.9.0 Figure 1, TS25.213 V3.9.0 Figure 7, TS25.213 V3.9.0 S4.2.1, TS25.213 V3.9.0 S4.4.2, TS25.214 V3.12.0 S5.1.2.1, TS25.214 V3.12.0 S5.1.2.5.1 |
| 39 | | | | | | | |
| BS, T | NEC | JP 2800618 | | 09/02/2013 | Device for encoding speech spectrum parameters with a smallest possible number of bits | 1 | TS26.190 V5.1.0, TS26.204 V5.2.0 |
| BS, T | NEC | EP 0610906 | DE, FR, GB, IT, NL, SE | 09/02/2014 | Device for encoding speech spectrum parameters with a smallest possible number of bits | 1 | TS26.190 V5.1.0 Fig. 2, TS26.190 V5.1.0 S4.3, TS26.190 V5.1.0 S5.2, TS26.190 V5.1.0 S5.2.1, TS26.190 V5.1.0 S5.2.2, TS26.190 V5.1.0 S5.2.5, TS26.204 V5.2.0 S1 |
| BS, T | NEC | US 5625744 | | 29/04/2014 | SPEECH PARAMETER ENCODING DEVICE WHICH INCLUDES A DIVIDING CIRCUIT FOR DIVIDING A FRAME SIGNAL OF AN INPUT SPEECH SIGNAL INTO SUBFRAME SIGNALS AND FOR OUTPUTTING A LOW RATE OUTPUT CODE SIGNAL | 1 | TS26.190 V5.1.0 S4.3, TS26.190 V5.1.0 S5.2, TS26.190 V5.1.0 S5.2.1, TS26.190 V5.1.0 S5.2.2, TS26.190 V5.1.0 S5.2.5, TS26.204 V5.2.0 S1 |
| 40 | | | | | | | |
| BS, RNC, T | Mitsubishi | JP 3499500 | | 21/04/2020 | Method for balancing the ratio Eb/I in a service multiplexing CDMA system and telecommunications systems using this method | 1, 7, 8, 13 | TS25.212 V3.11.0, TS25.331 V3.18.0 |
| BS, RNC, T | Mitsubishi | CN ZL00118065.7 | | 20/04/2020 | Method and mobile station for performing rate matching for uplink in a cdma system | 1, 5 | TS25.212 V3.11.0 S4.1, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.7, TS25.214 V3.12.0 S5.1.2.2.1, TS25.331 V3.21.0 S10.2.27, TS25.331 V3.21.0 S10.3.5.11, TS25.331 V3.21.0 S10.3.5.2, TS25.331 V3.21.0 S10.3.5.23, TS25.331 V3.21.0 S8.2.1, TS25.331 V3.21.0 S8.2.2 |
| BS, RNC, T | Mitsubishi | US 6501748 | | 20/04/2020 | Method for balancing the ratio Eb/I in a service Multiplexing CDMA system and telecommunication systems using same | 1, 12, 13 | TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.8, TS25.331 V3.21.0 S10.3.5.11, TS25.331 V3.21.0 S8.2.1, TS25.331 V3.21.0 S8.2.2 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 41 | | | | | | | |
| BS, T | Mitsubishi | JP 3524087 | | 21/04/2020 | Method for balancing the ratio Eb/I in a service multiplexing CDMA system and telecommunications systems using this method | 1, 7, 13 | TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.7.1, TS25.212 V3.11.0 S4.2.7.1.1, TS25.331 V3.18.0 S10.3.5.11, TS25.331 V3.18.0 S8.2.1, TS25.331 V3.18.0 S8.2.2 |
| BS, T | Mitsubishi | EP 1385290B1 | DE, FR, GB | 20/04/2020 | Method for balancing eb/I in a service multiplexing cdma system and telecommunication system using this method | 1, 7, 13, 15 | TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.7.1, TS25.212 V3.11.0 S4.2.7.1.1, TS25.331 V3.18.0 S10.3.5.11, TS25.331 V3.18.0 S8.2.1, TS25.331 V3.18.0 S8.2.2 |
| BS, T | Mitsubishi | CN 100553181 | | 20/04/2020 | Method and apparatus for configuring a channel of a Code Division Multiple Access type telecommunication system. | 1, 7, 13 | TS25.212 V3.11.0 S10.3.5.11, TS25.212 V3.11.0 S3.2, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.7.1.1, TS25.331 V3.18.0 Figure 8.2.2-3, TS25.331 V3.18.0 S8.2.1, TS25.331 V3.18.0 S8.2.2 |
| 42 | | | | | | | |
| BS, RNC | NEC | GB 2353439 | | 20/08/2019 | Power control for mobile communications | 1, 8, 9 | TS23.002 V3.6.0 S3, TS25.214 V3.12.0 S5, TS25.433 V3.14.0 S8, TS25.433 V3.14.0 S9 |
| 43 | | | | | | | |
| T | Sharp | JP 3559034 | | 21/08/2022 | Transmission of additional dedicated physical control channel (ADPCCH) in W-CDMA system | 1, 11, 21 | TS25.213 V5.5.0 |
| 44 | | | | | | | |
| BS, CN, RNC, T | Mitsubishi | JP 3560964 | | 28/10/2014 | Wideband speech reconstruction apparatus and method reconstructing a wideband speech signal from a narrow band speech code | 1, 3 | TS26.190 V5.1.0 |
| 45 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | JP 3014308 | | 23/10/2015 | Transmission power control scheme for mobile communication system | 15, 16, 17, 18, 19, 20 | TS25.214 V5.0.0, TS25.215 V5.0.0, TS25.301 V5.0.0, TS25.331 V5.0.0, TS25.427 V5.0.0 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|---|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 46 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | JP 3496721 | | 25/12/2017 | Frame transmitter-receiver | 14, 15, 20, 22 | TS25.301 V3.11.0 S5, TS25.402 V3.10.0 S4, TS25.402 V3.10.0 S6, TS25.402 V3.10.0 S7, TS25.427 V3.11.0 S6 |
| BS, RNC | NTT DoCoMo | US 6977903 | | 25/12/2017 | Frame synchronization circuit | 1, 30 | TS25.402 V3.10.0 S4, TS25.402 V3.10.0 S4.4, TS25.402 V3.10.0 S5, TS25.402 V3.10.0 S6, TS25.402 V3.10.0 S6.1, TS25.402 V3.10.0 S6.1.1, TS25.402 V3.10.0 S7, TS25.402 V3.10.0 S7.1, TS25.427 V3.11.0 S5, TS25.427 V3.11.0 S5.1, TS25.427 V3.11.0 S5.1.2, TS25.427 V3.11.0 S6, TS25.427 V3.11.0 S6.2, TS25.427 V3.11.0 S6.2.3 |
| BS, RNC | NTT DoCoMo | EP 0896442 | DE, FR, GB, IT, SE | 25/12/2017 | Frame transmitter-receiver | 1, 8, 15, 23 | TS25.402 V3.10.0 Figure 3, TS25.402 V3.10.0 Figure 9, TS25.402 V3.10.0 S4.4, TS25.402 V3.10.0 S5, TS25.402 V3.10.0 S6.1.1, TS25.402 V3.10.0 S7.1, TS25.427 V3.11.0 Figure 12, TS25.427 V3.11.0 S6.2.3 |
| 47 | | | | | | | |
| BS, T | Mitsubishi | JP 3554969 | | 18/08/2020 | Method for balancing the ratio Eb/I in a service multiplexing CDMA system and telecommunication systems using this method | 1, 5, 6 | TS25.212 V3.11.0 S3, TS25.212 V3.11.0 S4 |
| 48 | | | | | | | |
| BS, T | NTT DoCoMo | EP 1030455B1 | DE, FR, GB, IT | 18/02/2020 | Interleaving method, interleaving apparatus, turbo encoding method, and turbo encoder | 1, 10 | TS25.212 V3.11.0 S4.2.3.2.3, TS25.212 V3.11.0 S4.2.3.2.3.1, (1) (2), TS25.212 V3.11.0 S4.2.3.2.3.2 (1) (2) (5) (6), TS25.212 V3.11.0 S4.2.3.2.3.3 |
| BS, T | NTT DoCoMo | JP 3515036 | | 18/02/2020 | Interleaving method, interleaving apparatus, turbo encoding method, and turbo encoder | 1, 8 | TS25.212 V3.11.0 S4, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.3, TS25.212 V3.11.0 S4.2.3.2, TS25.212 V3.11.0 S4.2.3.2.3, TS25.212 V3.11.0 S4.2.3.2.3.1, TS25.212 V3.11.0 S4.2.3.2.3.2, TS25.212 V3.11.0 S4.2.3.2.3.3 |
| BS, T | NTT DoCoMo | US 6553516 | | 18/02/2020 | Interleaving Method, Interleaving Apparatus, Turbo Encoding Method, and Turbo Encoder | 40, 42 | TS25.212 V5.0.0 S4, TS25.212 V5.0.0 S4.2, TS25.212 V5.0.0 S4.2.3, TS25.212 V5.0.0 S4.2.3.2, TS25.212 V5.0.0 S4.2.3.2.3, TS25.212 V5.0.0 S4.2.3.2.3.1, TS25.212 V5.0.0 S4.2.3.2.3.2, TS25.212 V5.0.0 S4.2.3.2.3.3 |
| BS, T | NTT DoCoMo | AU 738693 | AU | 18/02/2020 | Interleaving Method, Interleaving Apparatus, Turbo Encoding Method, and Turbo Encoder | 1, 14 | TS25.212 V3.11.0 S4.2.3.2.3, TS25.212 V3.11.0 S4.2.3.2.3.1, TS25.212 V3.11.0 S4.2.3.2.3.2 |
| BS, T | NTT DoCoMo | SG 80092 | | 18/02/2020 | Interleaving Method, Interleaving Apparatus, Turbo Encoding Method, and Turbo Encoder. | 1, 14 | TS25.212 V3.11.0 S4.2.3.2.3, TS25.212 V3.11.0 S4.2.3.2.3.1, TS25.212 V3.11.0 S4.2.3.2.3.2 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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|---|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 49 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | JP 2927683 | | 22/07/2014 | Transmission system for broadcasting information in mobile communication system | 1 | TS25.301 V3.11.0 S5, TS25.331 V3.16.0 S10, TS25.331 V3.16.0 S8, TS25.401 V3.10.0 S7 |
| 50 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | JP 2939114 | | 27/04/2014 | Mobile communication handover method, Mobile Station, and Base Station | 1, 3 | TS23.009 V3.13.0 S5, TS23.009 V4.7.0 S5, TS23.009 V5.4.0 S5, TS25.133 V3.9.0 S5, TS25.133 V4.4.0 S5, TS25.133 V5.2.0 S5, TS25.201 V3.3.0 S4, TS25.201 V4.2.0 S4, TS25.201 V5.0.0 S4, TS25.211 V3.10.0 S5, TS25.211 V4.4.0 S5, TS25.211 V5.0.0 S5, TS25.213 V3.7.0 S5, TS25.213 V4.2.0 S5, TS25.213 V5.0.0 S5, TS25.214 V3.10.0 S4, TS25.214 V4.4.0 S4, TS25.214 V5.0.0 S4, TS25.331 V3.10.0 S10, TS25.331 V3.10.0 S14, TS25.331 V3.10.0 S8, TS25.331 V4.4.0 S10, TS25.331 V4.4.0 S14, TS25.331 V4.4.0 S8, TS25.331 V5.0.0 S10, TS25.331 V5.0.0 S14, TS25.331 V5.0.0 S8, TS25.401 V3.9.0 S3, TS25.401 V4.3.0 S3, TS25.401 V5.2.0 S3, TS25.430 V3.8.0 S5, TS25.430 V4.4.0 S5, TS25.430 V5.2.0 S5 |
| 51 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | JP 2939116 | | 27/04/2014 | Mobile communication handover method, Mobile Station and Base Station | 1, 3 | TS23.009 V5.4.0 S5, TS25.133 V5.2.0 S5, TS25.201 V5.0.0 S4, TS25.211 V5.0.0 S5, TS25.213 V5.0.0 S5, TS25.214 V5.0.0 Annex C, TS25.214 V5.0.0 S4, TS25.215 V5.0.0 S5, TS25.331 V5.0.0 S10, TS25.331 V5.0.0 S14, TS25.331 V5.0.0 S8, TS25.401 V5.2.0 S3, TS25.430 V5.2.0 S5 |
| 52 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | JP 3312997 | | 20/07/2014 | Switching over apparatus of communication channels | 1 | TS25.301 V3.11.0 S5, TS25.303 V3.12.0 S5.2, TS25.303 V3.12.0 S5.3.2, TS25.303 V3.12.0 S5.3.3, TS25.303 V3.12.0 S6, TS25.303 V3.12.0 S7, TS25.321 V3.16.0 S11.1, TS25.331 V3.16.0 S10.2.50, TS25.331 V3.16.0 S14.4.1, TS25.331 V3.16.0 S14.4.2.1 |
| 53 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | JP 3313573 | | 05/04/2016 | Synchronization establishing method of spreading code in mobile communication system, Mobile Station, and Base Station | 1, 10 | TS25.211 V5.0.0 S7.6.3, TS25.215 V5.0.0 S5.1, TS25.331 V5.0.0 S10.3.7.6, TS25.331 V5.0.0 S14.1.2, TS25.331 V5.0.0 S14.1.6, TS25.402 V5.0.0 S5, TS25.402 V5.0.0 S8.2.1 with Fig. 15 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|--|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 54 T | NTT DoCoMo | JP 3421210 | | 18/04/2023 | Signal Transmission Method and Signal Transmission Apparatus in CDMA Mobile Communication System | 3, 4 | TS25.201 V5.0.0, TS25.211 V5.0.0, TS25.212 V5.0.0, TS25.213 V5.0.0, TS25.214 V5.0.0 |
| 55 T | Sharp | JP 3588104 | | 21/08/2022 | Transmission of Additional Dedicated Physical Control CHannel (ADPCCH) in W-CDMA system | 1, 11 | TS25.213 V5.5.0 |
| 56 T | Sharp | JP 3588105 | | 21/08/2022 | Transmission of Additional Dedicated Physical Control CHannel (ADPCCH) in W-CDMA system | 1, 11 | TS25.213 V5.5.0 S4 |
| 57 BS, RNC, T | Mitsubishi | EP 1047219 | DE, FR, GB | 20/04/2020 | Method for balancing the ratio Eb/I in a service multiplexing CDMA system and telecommunication systems using same | 1, 7, 8, 12 | TS25.212 V3.11.0 S3.2, TS25.212 V3.11.0 S3.3, TS25.212 V3.11.0 S4.1, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.13, TS25.212 V3.11.0 S4.2.3, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.8, TS25.331 V3.18.0 S10.2.27, TS25.331 V3.18.0 S10.3.5, TS25.331 V3.18.0 S8.2.2 |
| 58 BS, CN, RNC, T | Mitsubishi | JP 3598111 | | 28/10/2014 | Wideband Speech Reconstruction Apparatus, Wideband Speech Reconstruction Method, Speech Transmission System, and Speech Transmission Method | 1, 2 | TS26.190 V5.1.0 S6, TS45.009 V5 S3, TS45.009 V5 S3.1, TS45.009 V5 S3.1.1, TS45.009 V5 S5 |
| 59 BS, CN, RNC, T | Mitsubishi | JP 3598112 | | 28/10/2014 | Wideband Speech Reconstruction Apparatus, Wideband Speech Reconstruction Method, Speech Transmission System, and Speech Transmission Method | 1, 2 | TS26.190 V5.1.0 S6, TS26.190 V5.1.0 S8, TS45.009 V5 S3, TS45.009 V5 S3.1, TS45.009 V5 S3.1.1, TS45.009 V5 S5 |
| 60 BS, T | Fujitsu | JP 3380862 | | 18/03/2013 | Base Station and Remote Station | 1, 4 | TS25.101 V3.17.0 S6.2.1, TS25.201 V3.4.0 S4.1.1, TS25.212 V3.11.0 S4.2.7.1.1, TS25.213 V3.9.0 S4, TS25.306 V3.10.0 S4, TS25.331 V3.20.0 S10.3.6.18 |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|---|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 61 | | | | | | | |
| BS, T | Fujitsu | JP 3257984 | | 30/10/2018 | Interleaving method and apparatus, de-interleaving method and apparatus, and interleaving/de-interleaving system and apparatus | 31 | TS25.211 V3.10.0 S5, TS25.212 V3.9.0 S4, TS25.213 V3.7.0 S4, TS25.213 V3.7.0 S5 |
| BS, T | Fujitsu | US 6971050 | | 29/04/2019 | INTERLEAVING METHOD AND APPARATUS, DE-INTERLEAVING METHOD AND APPARATUS, AND INTERLEAVING/ DE-INTERLEAVING SYSTEM AND APPARATUS | 53 | TS25.212 V3.9.0 Fig. 1, TS25.212 V3.9.0 Fig. 2, TS25.212 V3.9.0 S4.2, TS25.212 V3.9.0 S4.2.5.2 |
| T | Fujitsu | US 7146545 | | 29/04/2019 | Interleaving Method and Apparatus, De-Interleaving Method and Apparatus, and Interleaving/De-Interleaving System and Apparatus. | 13 | TS25.212 V3.9.0 Fig. 1, TS25.212 V3.9.0 Fig. 2, TS25.212 V3.9.0 S4.2, TS25.212 V3.9.0 S4.2.5.2 |
| 62 | | | | | | | |
| BS, T | Fujitsu | JP 3479935 | | 19/08/2018 | Handover method in CDMA mobile communication system | 8 | TS25.133 V3.19.0 S5.2.2.2, TS25.215 V3.12.0 S5.1.8, TS25.402 V3.10.0 S8.2, TS25.402 V3.10.0 S9.3.2 |
| 63 | | | | | | | |
| T | Fujitsu | EP 1078547 | DE, FI, FR, GB, IT, SE | 28/04/2019 | SOFT HAND-OFF IN CELLULAR MOBILE COMMUNICATIONS NETWORKS | 8 | TR25.990 V3.0.0 S3, TR25.990 V3.0.0 S4.21, TR25.990 V3.0.0 S4.3, TR25.990 V3.0.0 S4.6, TS25.214 V3.9.0 S5.2.1.4, TS25.214 V3.9.0 S5.2.1.4.1, TS25.214 V3.9.0 S5.2.1.4.3, TS25.214 V3.9.0 S5.2.1.4.4 |
| BS, T | Fujitsu | EP 1094680 | DE, FR, GB | 14/12/2019 | Base station selection in a cellular mobile communication network | 3 | TS25.214 V3.12.0 S5.2.1.4, TS25.214 V3.12.0 S5.2.1.4.1, TS25.214 V3.12.0 S5.2.1.4.3, TS25.214 V3.12.0 S5.2.1.4.4, TS25.214 V3.12.0 S5.2.1.4.5 |
| T | Fujitsu | JP 3949608 | | 28/04/2019 | Cellular Mobile Communications Networks | 2 | TR25.990 V3.0.0 S3, TR25.990 V3.0.0 S4, TS25.214 V3.12.0 S5.1.2.2.3.2, TS25.214 V3.12.0 S5.2.1.4.1, TS25.214 V3.12.0 S5.2.1.4.3, TS25.214 V3.12.0 S5.2.1.4.4, TS25.214 V3.12.0 S5.2.1.4.5 |
| T | Fujitsu | CN 99806160 | | 28/04/2019 | Base station selection in a cellular mobile communication network. | 2 | TR25.990 V3.0.0 S3, TR25.990 V3.0.0 S4, TS25.214 V3.12.0 S5.1.2.2.3.2, TS25.214 V3.12.0 S5.2.1.4.1, TS25.214 V3.12.0 S5.2.1.4.3, TS25.214 V3.12.0 S5.2.1.4.4, TS25.214 V3.12.0 S5.2.1.4.5, TS25.214 V3.12.0 Table 6 |
| BS, T | Fujitsu | KR 10-0619658 | | 28/04/2019 | Base station selection in a cellular mobile communication network. | 3 | TS25.214 V3.12.0 S5.2.1.4, TS25.214 V3.12.0 S5.2.1.4.1, TS25.214 V3.12.0 S5.2.1.4.3, TS25.214 V3.12.0 S5.2.1.4.4, TS25.214 V3.12.0 S5.2.1.4.5, TS25.214 V3.12.0 Table 6 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 64 | | | | | | | |
| BS, RNC, T | Mitsubishi | EP 1156616 | DE, FR, GB | 06/08/2021 | Method for balancing the ratio Eb/I in a service multiplexing CDMA system and telecommunication system using this method | 1, 5, 10, 12 | TS25.212 V3.11.0 S4.2, TS25.301 V3.11.0 S5.2.2, TS25.301 V3.11.0 S5.4.2, TS25.331 V3.20.0 S10.2.27, TS25.331 V3.20.0 S10.3.6.88, TS25.331 V3.20.0 S8.2.2, TS25.401 V3.10.0 S7.1 |
| BS, RNC, T | Mitsubishi | JP 3617480 | | 10/08/2021 | Method for balancing the ratio Eb/I in a service multiplexing CDMA system and telecommunication system using this method | 1, 5, 11, 12 | TS25.212 V3.11.0 S4.2, TS25.301 V3.11.0 S5.2.2, TS25.301 V3.11.0 S5.4.2, TS25.331 V3.20.0 S10.2.27, TS25.331 V3.20.0 S10.3.6.18, TS25.331 V3.20.0 S10.3.6.88, TS25.331 V3.20.0 S8.2.1, TS25.331 V3.20.0 S8.2.2, TS25.401 V3.10.0 S7.1 |
| T | Mitsubishi | CN 100394713 | | 20/04/2020 | Method for configuring code division multiple access communications system and mobile station, and a mobile station | 3, 5 | TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 S4.1, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.7.1.1, TS25.331 V3.18.0 Figure 8.2.2-3, TS25.331 V3.18.0 S10.2.27, TS25.331 V3.18.0 S10.3.6.88, TS25.331 V3.18.0 S8.2.1, TS25.331 V3.18.0 S8.2.2 |
| 65 | | | | | | | |
| BS, T | Mitsubishi | EP 1184992 | DE, ES, FI, FR, GB, IT, PT, SE | 05/03/2019 | Spread spectrum communication device and spread spectrum communication method | 1, 3 | TS25.101 V3.13.0 Annex A.5D Table A.22, TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 Fig. 11, TS25.212 V3.11.0 Fig. 14(1), TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 S1, TS25.212 V3.11.0 S4, TS25.212 V3.11.0 S4.1, TS25.212 V3.11.0 S4.2.11, TS25.212 V3.11.0 S4.2.12, TS25.212 V3.11.0 S4.4, TS25.212 V3.11.0 S4.4.3.1, TS25.212 V3.11.0 S4.4.3.2 |
| BS, T | Mitsubishi | KR 10-0422606 | | 05/03/2019 | Spread spectrum communication device and spread spectrum communication method | 1, 4 | TS25.101 V3.13.0 Annex A.5, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.11, TS25.212 V3.11.0 S4.4, TS25.212 V3.11.0 S4.4.3, TS25.212 V3.11.0 S4.4.4 |
| BS, T | Mitsubishi | CN 100492930 | | 05/03/2019 | Spread spectrum communication apparatus and spread spectrum communication method | 1, 5 | TS25.101 V3.13.0 Annex A.5 Table A.22, TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 Fig. 11, TS25.212 V3.11.0 Fig. 14(1), TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 S1, TS25.212 V3.11.0 S4, TS25.212 V3.11.0 S4.1, TS25.212 V3.11.0 S4.2.11, TS25.212 V3.11.0 S4.2.12, TS25.212 V3.11.0 S4.2.12.1, TS25.212 V3.11.0 S4.4, TS25.212 V3.11.0 S4.4.3, TS25.212 V3.11.0 S4.4.3.1, TS25.212 V3.11.0 S4.4.3.2 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 66 | | | | | | | |
| BS, T | Mitsubishi | EP 0798872B1 | DE, FR, GB | 21/03/2017 | CDMA mobile communications system With effect from 1 July 2010 the effective ownership of this patent has been transferred to Sony Corporation : the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license | * 1 | TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3.2, TS25.211 V3.12.0 S5.3.3.6 |
| BS, T | Mitsubishi | KR 10-0223364 | | 21/03/2017 | CDMA mobile communications system With effect from 1 July 2010 the effective ownership of this patent has been transferred to Sony Corporation: the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license | * 1 | TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3.2, TS25.211 V3.12.0 S5.3.3.6 |
| 67 | | | | | | | |
| BS, CN, RNC, T | Fujitsu | JP 2084950 | | 09/09/2006 (Expired) | Decoder and coding transmission equipment | 1 | TS26.090 V3.1.0 S3.1, TS26.090 V3.1.0 S6, TS26.090 V3.1.0 S6.2.1, TS45.009 V5 S2, TS45.009 V5 S3, TS45.009 V5 S3.1.1 |
| 68 | | | | | | | |
| BS, T | Fujitsu | JP 3192839 | | 20/09/2013 | METHOD OF DETERMINING INITIAL TRANSMISSION POWER | 17 | TS25.211 V3.12.0 S7.3, TS25.213 V3.7.0 S4.3.2.2, TS25.213 V3.7.0 S4.3.2.5, TS25.213 V3.7.0 S4.3.3.2, TS25.214 V3.12.0 S6.1 |
| 69 | | | | | | | |
| T | Fujitsu | JP 2908950 | | 22/12/2012 | RADIO COMMUNICATION SYSTEM SEARCHING METHOD | 1 | TS23.122 V3.7.0 S2, TS23.122 V3.7.0 S4.4.2, TS23.122 V3.7.0 S4.4.3.1.1 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 70 | | | | | | | |
| RNC, T | Fujitsu | JP 3040870 | | 18/02/2012 | DIGITAL MOBILE TELEPHONE SYSTEM HAVING OVERLAY CONFIGURATION | 2 | TR25.922 V3.7.0 S4.3.2.1, TS25.303 V3.12.0 S6.4.7, TS25.305 V3.11.0 S5, TS25.305 V3.11.0 S5.1, TS25.331 V3.21.0 S14.2.1 |
| BS, RNC, T | Fujitsu | EP 0549811 | DE, FR, GB, SE | 15/07/2012 | DIGITAL MOBILE TELEPHONE SYSTEM HAVING OVERLAY CONFIGURATION | 15 | TR25.922 V3.7.0 Fig. 4.1, TR25.922 V3.7.0 S4.3.2.1, TS25.303 V3.12.0 Fig. 33, TS25.303 V3.12.0 S6.4.7, TS25.305 V3.11.0 Fig. 5.1, TS25.305 V3.11.0 S5, TS25.331 V3.21.0 S14.2.1, TS25.331 V3.21.0 S14.2.1.3 |
| BS, RNC, T | Fujitsu | US 6067455 | | 15/07/2012 | Digital mobile telephone system having overlay configuration. | 13 | TR25.922 V3.7.0 Fig. 4.1, TR25.922 V3.7.0 S4.3.2.1, TS25.303 V3.12.0 Fig. 33, TS25.303 V3.12.0 S6.4.7, TS25.305 V3.11.0 Fig. 5.1, TS25.305 V3.11.0 S5, TS25.331 V3.21.0 S14.2.1, TS25.331 V3.21.0 S14.2.1.3 |
| 71 | | | | | | | |
| BS, T | Fujitsu | JP 3282319 | | 12/11/2013 | Mobile Communication System, Radio Base Station and Mobile Terminal Thereof | 1 | TS25.133 V3.19.0 S4, TS25.133 V3.19.0 S9.1.1.1, TS25.133 V3.19.0 S9.1.1.1.2, TS25.211 V3.10.0 S5.3.3, TS25.211 V3.10.0 S5.3.3.1, TS25.211 V3.10.0 S5.3.3.1.1, TS25.304 V3.14.0 S4.3, TS25.304 V3.14.0 S5.2.3.1.2, TS25.305 V3.11.0 S5, TS25.305 V3.11.0 S5.1, TS25.305 V3.11.0 S5.2.2, TS25.331 V3.20.0 S8.5.5.1 |
| 72 | | | | | | | |
| BS, T | Fujitsu | JP 3348274 | | 11/10/2014 | Site Diversity System, Base Station, Mobile Station, and Communication Control Method | 13 | TS25.213 V3.19.0 S5.1, TS25.214 V3.10.0 S4.3.4, TS25.215 V3.12.0 S5.1.10, TS25.331 V3.20.0 S14.6.2.6 |
| 73 | | | | | | | |
| CN, T | NTT DoCoMo | JP 3540588 | | 07/01/2018 | Mobile Packet Communication Network, Mobile Communication Terminal, and Packet Switching Method | 1, 3 | TS22.060 V3.5.0 S7, TS22.060 V3.5.0 S7.9, TS23.060 V3.16.0 S13, TS23.060 V3.16.0 S13.2, TS23.060 V3.16.0 S14, TS23.060 V3.16.0 S14.4 Annex A, TS23.060 V3.16.0 S4, TS23.060 V3.16.0 S5, TS23.060 V3.16.0 S5.1, TS23.060 V3.16.0 S5.4, TS23.060 V3.16.0 S5.4.1, TS23.060 V3.16.0 S9, TS23.060 V3.16.0 S9.2, TS23.060 V3.16.0 S9.2.2, TS23.060 V3.16.0 S9.2.2.1, TS29.061 V3.14.0 S11, TS29.061 V3.14.0 S11.2, TS32.200 V4.5.0 S4, TS32.200 V4.5.0 S4.1, TS32.215 V4.8.0 S4.3, TS32.215 V4.8.0 S5, TS32.215 V4.8.0 S5.20, TS32.215 V4.8.0 S5.6 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 74 | | | | | | | |
| BS, RNC | NTT DoCoMo | JP 3159301 | | 02/05/2016 | Method for transmitting data signals | 2, 3 | TS25.211 V5.0.0 S5, TS25.211 V5.0.0 S5.3, TS25.211 V5.0.0 S5.3.2, TS25.211 V5.0.0 S5.3.3, TS25.211 V5.0.0 S5.3.3.2, TS25.212 V5.0.0 S4, TS25.212 V5.0.0 S4.2, TS25.212 V5.0.0 S4.2.12, TS25.212 V5.0.0 S4.2.9, TS25.212 V5.0.0 S4.2.9.2 |
| 75 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | JP 3370926 | | 11/03/2018 | Mobile station position estimation method, base station and mobile station for cellular mobile communication | 1, 10, 19 | TR21.905 V3.3.0 S3, TS25.133 V3.17.0 S9.1.9.2.1, TS25.133 V3.17.0 S9.2.8.1, TS25.133 V3.17.0 Table 9.27, TS25.133 V3.17.0 Table 9.49, TS25.211 V3.12.0 S5, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3.2, TS25.215 V3.12.0 S5, TS25.215 V3.12.0 S5.1.10, TS25.215 V3.12.0 S5.2.8, TS25.301 V3.11.0 S5.2.11, TS25.305 V3.11.0 Fig. 9.1, TS25.305 V3.11.0 Fig. 9.2, TS25.305 V3.11.0 S4.2, TS25.305 V3.11.0 S5, TS25.305 V3.11.0 S9, TS25.305 V3.11.0 S9.6 |
| BS, RNC, T | NTT DoCoMo | US 6181944 | | 13/03/2018 | MOBILE STATION POSITION ESTIMATION SCHEME FOR CELLULAR MOBILE COMMUNICATION SYSTEM | 13, 33, 39 | TR21.905 V3.3.0 S3, TS25.133 V3.17.0 S3, TS25.133 V3.17.0 S9.1.9, TS25.133 V3.17.0 S9.1.9.2, TS25.133 V3.17.0 S9.1.9.2.1, TS25.133 V3.17.0 S9.2, TS25.133 V3.17.0 S9.2.8.1, TS25.211 V3.12.0 S5, TS25.211 V3.12.0 S5.2, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3, TS25.211 V3.12.0 S5.3.2, TS25.215 V3.12.0 S5.1, TS25.215 V3.12.0 S5.1.10, TS25.215 V3.12.0 S5.2, TS25.215 V3.12.0 S5.2.8, TS25.301 V3.11.0 S5, TS25.301 V3.11.0 S5.2, TS25.301 V3.11.0 S5.2.1, TS25.301 V3.11.0 S5.2.1.1, TS25.305 V3.11.0 S5, TS25.305 V3.11.0 S9, TS25.305 V3.11.0 S9.6 |
| 76 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | JP 2966296 | | 14/10/2014 | Transmission power control method | 1 | TR21.905 V5.2.0 Def. of Macro Diversity Handover, TS25.133 V5.0.0 S5.1.1, TS25.214 V5.0.0 Annex B2, TS25.214 V5.0.0 S5.1.2.2.1, TS25.214 V5.0.0 S5.1.2.2.2, TS25.214 V5.0.0 S5.2.1.2.1, TS25.301 V5.0.0 S5.2.2, TS25.331 V5.0.0 S14.9.1, TS25.331 V5.0.0 S5.1.1, TS25.401 V5.2.0 S6, TS25.401 V5.2.0 S6 Figure 5, TS25.401 V5.2.0 S7.2.4.3, TS25.402 V5.0.0 S7.1, TS25.402 V5.0.0 S7.1 Fig. 9, TS25.427 V5.0.0 S5.4, TS25.427 V5.0.0 S6.2.4.5 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 77 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | JP 3415018 | | 07/01/2018 | Method and Apparatus for Controlling Multiple Calls/Connections | 1 | TS25.211 V3.12.0 S5, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S6.1, TS25.212 V3.11.0 S4.1, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.12, TS25.212 V3.11.0 S4.2.8, TS25.213 V3.9.0 S4.2.1, TS25.213 V3.9.0 S4.3.1.2, TS25.331 V3.18.0 S1, TS25.331 V3.18.0 S10.2, TS25.331 V3.18.0 S10.2.33, TS25.331 V3.18.0 S10.3.6, TS25.331 V3.18.0 S10.3.6.88, TS25.331 V3.18.0 S5.2.8, TS25.331 V3.18.0 S8.6.6.6, TS25.413 V3.14.0 S8.2, TS25.413 V3.14.0 S8.2.1, TS25.413 V3.14.0 S8.6, TS25.413 V3.14.0 S9.1.3, TS25.413 V3.14.0 S9.2.1.2, TS25.413 V3.14.0 S9.2.1.28, TS34.108 V3.14.0 S1, TS34.108 V3.14.0 S6.10, TS34.108 V3.14.0 S6.10.2.4.1, TS34.108 V3.14.0 S6.10.2.4.1.38 |
| 78 | | | | | | | |
| BS, T | Mitsubishi | KR 10-0429087 | | 05/03/2019 | Spread spectrum communication device and spread communication method | 1, 9 | TS25.212 V5.3.0 S4.4, TS25.212 V5.3.0 S4.4 Fig. 11, TS25.214 V5.4.0 S5.1, TS25.214 V5.4.0 S5.1.2.1, TS25.214 V5.4.0 S5.1.2.2, TS25.214 V5.4.0 S5.1.2.2.1, TS25.214 V5.4.0 S5.1.2.3, TS25.214 V5.4.0 S5.2, TS25.214 V5.4.0 S5.2.1.2, TS25.214 V5.4.0 S5.2.1.2.2, TS25.214 V5.4.0 S5.2.1.3 |
| BS, T | Mitsubishi | US 6680927B2 | | 05/03/2019 | Spread spectrum communication device and spread communication method | 9, 12 | TS25.212 V5.3.0 S4.4, TS25.214 V5.4.0 S5.1.2.2.1, TS25.214 V5.4.0 S5.1.2.2.2.1, TS25.214 V5.4.0 S5.1.2.3, TS25.214 V5.4.0 S5.2.1.2.2 |
| BS, T | Mitsubishi | EP 1187358B1 | DE, ES, FI, FR, GB, IT, PT, SE | 05/03/2019 | Spread spectrum communication device and spread communication method | 1, 3 | TS25.211 V5.4.0 S5, TS25.212 V5.3.0 S4, TS25.212 V5.3.0 S4.4, TS25.212 V5.3.0 S4.4 Fig. 11, TS25.212 V5.3.0 S4.4.1, TS25.212 V5.3.0 S4.4.2, TS25.214 V5.4.0 S5, TS25.214 V5.4.0 S5.1, TS25.214 V5.4.0 S5.1.2.2, TS25.214 V5.4.0 S5.1.2.2.1, TS25.214 V5.4.0 S5.1.2.3 |
| BS, T | Mitsubishi | CN 100512033 | | 05/03/2019 | Spread spectrum communication device and spread spectrum communication method | 1, 2 | TS25.211 V5.4.0 S5.2.1, TS25.211 V5.4.0 Table 2, TS25.212 V5.3.0 Fig. 11, TS25.212 V5.3.0 S3.1, TS25.212 V5.3.0 S4.4, TS25.214 V5.4.0 S5.1.2.1, TS25.214 V5.4.0 S5.1.2.2.1, TS25.214 V5.4.0 S5.1.2.2.2.1, TS25.214 V5.4.0 S5.1.2.3, TS25.214 V5.4.0 S5.2.1.2, TS25.214 V5.4.0 S5.2.1.2.1, TS25.214 V5.4.0 S5.2.1.2.2, TS25.214 V5.4.0 S5.2.1.3, TS25.214 V5.4.0 Table 2 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|--|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 79 BS, RNC | NTT DoCoMo | JP 3385200 | | 24/12/2017 | METHOD OF TRANSMITTING SIGNALS AND METHOD OF ACQUISITION FOR SPREADING CODE IN MOBILE COMMUNICATIONS SYSTEM | 27 | TS25.201 V3.4.0 S4, TS25.201 V3.4.0 S4.2, TS25.201 V3.4.0 S4.2.1, TS25.201 V3.4.0 S4.2.3, TS25.211 V3.12.0 S5, TS25.211 V3.12.0 S5.3, TS25.211 V3.12.0 S5.3.2, TS25.211 V3.12.0 S5.3.3, TS25.211 V3.12.0 S5.3.3.3, TS25.211 V3.12.0 S5.3.3.3 Fig. 15, TS25.211 V3.12.0 S5.3.3.5, TS25.211 V3.12.0 S5.3.3.5 Fig. 18, TS25.213 V3.9.0 S4, TS25.213 V3.9.0 S4.1, TS25.213 V3.9.0 S4.3.1 Fig. 4, TS25.213 V3.9.0 S5, TS25.213 V3.9.0 S5 Fig. 8, TS25.213 V3.9.0 S5.1, TS25.213 V3.9.0 S5.2, TS25.213 V3.9.0 S5.2.1, TS25.213 V3.9.0 S5.2.2, TS25.213 V3.9.0 S5.2.3, TS25.213 V3.9.0 S5.2.3.1 |

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|---|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 80 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | US 6728227 | | 03/06/2018 | MOBILE RADIO COMMUNICATION SYSTEM, MOBILE STATION, AND METHOD FOR CONTROLLING DIVERSITY HANDOVER BRANCH | 2 | TS25.133 V3.18.0 S5.1.1, TS25.133 V3.18.0 S8.1.2.2, TS25.133 V3.18.0 S8.1.2.2.1, TS25.303 V3.12.0 S6.4.4, TS25.331 V3.19.0 S10.2.17, TS25.331 V3.19.0 S10.2.19, TS25.331 V3.19.0 S10.2.48.8.14, TS25.331 V3.19.0 S10.2.48.8.15, TS25.331 V3.19.0 S10.3.7.33, TS25.331 V3.19.0 S10.3.7.35, TS25.331 V3.19.0 S10.3.7.36, TS25.331 V3.19.0 S10.3.7.40, TS25.331 V3.19.0 S10.3.7.44, TS25.331 V3.19.0 S10.3.7.47, TS25.331 V3.19.0 S13.4.0, TS25.331 V3.19.0 S8 table 1.1, TS25.331 V3.19.0 S8.3.4.1, TS25.331 V3.19.0 S8.3.4.2, TS25.331 V3.19.0 S8.4.0, TS25.401 V3.10.0 S3.1, TS25.401 V3.10.0 S6, TS25.426 V3.9.0 S4.1, TS25.426 V3.9.0 S4.2, TS25.430 V3.8.0 S5.2.6.2 |
| BS, RNC, T | NTT DoCoMo | EP 0935400 | DE, FR, GB, IT, SE | 03/06/2018 | MOBILE RADIO COMMUNICATION SYSTEM, MOBILE STATION, AND METHOD FOR CONTROLLING DIVERSITY HAND-OVER BRANCH | 1, 6 | TS25.133 V3.21.0 S5.1.1, TS25.133 V3.21.0 S8.1.2.2, TS25.133 V3.21.0 S8.1.2.2.1, TS25.211 V3.12.0 S5.3.3.1.1, TS25.215 V3.13.0 S5.1.1, TS25.215 V3.13.0 S5.1.5, TS25.331 V3.21.0 S10.2.17, TS25.331 V3.21.0 S10.2.19, TS25.331 V3.21.0 S10.2.48.8.15, TS25.331 V3.21.0 S10.3.7.33, TS25.331 V3.21.0 S10.3.7.35, TS25.331 V3.21.0 S10.3.7.36, TS25.331 V3.21.0 S10.3.7.40, TS25.331 V3.21.0 S10.3.7.44, TS25.331 V3.21.0 S10.3.7.47, TS25.331 V3.21.0 S13.4.0, TS25.331 V3.21.0 S8 Table 8.1.1, TS25.331 V3.21.0 S8.3.4.1, TS25.331 V3.21.0 S8.3.4.2, TS25.331 V3.21.0 S8.4.0, TS25.401 V3.10.0 S3.1, TS25.430 V3.8.0 S5.2.6.2 |
| BS, RNC, T | NTT DoCoMo | US 7403777 | | 02/09/2019 | Mobile communication system, mobile station and diversity handover branch control method. | 1 | TS25.133 V3.22.0 S5.1.1, TS25.133 V3.22.0 S8.1.2.2, TS25.133 V3.22.0 S8.1.2.2.1, TS25.211 V3.12.0 S5.3.3.1.1, TS25.215 V3.13.0 S5.1.1, TS25.215 V3.13.0 S5.1.5, TS25.331 V3.21.0 S10.2.17, TS25.331 V3.21.0 S10.2.19, TS25.331 V3.21.0 S10.2.48.8.14, TS25.331 V3.21.0 S10.2.48.8.15, TS25.331 V3.21.0 S10.3.7.33, TS25.331 V3.21.0 S10.3.7.35, TS25.331 V3.21.0 S10.3.7.36, TS25.331 V3.21.0 S10.3.7.40, TS25.331 V3.21.0 S10.3.7.44, TS25.331 V3.21.0 S10.3.7.47, TS25.331 V3.21.0 S13.4.0, TS25.331 V3.21.0 S8 Table 8.1.1, TS25.331 V3.21.0 S8.3.4.1, TS25.331 V3.21.0 S8.3.4.2, TS25.331 V3.21.0 S8.4.0, TS25.401 V3.10.0 S3.1, TS25.401 V3.10.0 S6, TS25.430 V3.8.0 S5.2.6.2 |
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|--|--------------------------------|----------------------|---|---|--|-------------------------|---|
| BS, RNC, T | NTT DoCoMo | CN 98800762 | | 03/06/2018 | Mobile Radio Communication System, Mobile Station, and Method for Controlling Diversity Hand-over Branch | 1, 4, 7 | TS25.133 V3.21.0 S5.1.1, TS25.133 V3.21.0 S8.1.2.2, TS25.133 V3.21.0 S8.1.2.2.1, TS25.215 V3.13.0 S5.1.1, TS25.215 V3.13.0 S5.1.5, TS25.331 V3.21.0 S10.2.17, TS25.331 V3.21.0 S10.2.19, TS25.331 V3.21.0 S10.2.48.8.14, TS25.331 V3.21.0 S10.2.48.8.15, TS25.331 V3.21.0 S10.3.7.33, TS25.331 V3.21.0 S10.3.7.35, TS25.331 V3.21.0 S10.3.7.36, TS25.331 V3.21.0 S10.3.7.40, TS25.331 V3.21.0 S10.3.7.44, TS25.331 V3.21.0 S10.3.7.47, TS25.331 V3.21.0 S13.4.0, TS25.331 V3.21.0 S8 Table 8.1.1, TS25.331 V3.21.0 S8.3.4.1, TS25.331 V3.21.0 S8.3.4.2, TS25.331 V3.21.0 S8.4.0, TS25.401 V3.10.0 S3.1, TS25.430 V3.8.0 S5.2.6.2 |
| BS, RNC, T | NTT DoCoMo | CA 2262960 | | 03/06/2018 | Mobile Radio Communication System, Mobile Station, and Method for Controlling Diversity Handover Branch | 4, 7, 19 | TS25.133 V5.18.0 S5.1.1, TS25.133 V5.18.0 S8.1.2.2, TS25.133 V5.18.0 S8.1.2.2.1, TS25.213 V5.6.0 S5.2.2, TS25.215 V5.7.0 S5.1.1, TS25.215 V5.7.0 S5.1.5, TS25.331 V5.24.0 S10.2.17, TS25.331 V5.24.0 S10.2.19, TS25.331 V5.24.0 S10.2.48.8.14, TS25.331 V5.24.0 S10.2.48.8.15, TS25.331 V5.24.0 S10.3.6.60, TS25.331 V5.24.0 S10.3.7.3, TS25.331 V5.24.0 S10.3.7.33, TS25.331 V5.24.0 S10.3.7.35, TS25.331 V5.24.0 S10.3.7.36, TS25.331 V5.24.0 S10.3.7.40, TS25.331 V5.24.0 S10.3.7.44, TS25.331 V5.24.0 S10.3.7.47, TS25.331 V5.24.0 S13.4.0, TS25.331 V5.24.0 S8.4.0, TS25.331 V5.24.0 Section 8 Table 8.1.1, TS25.401 V5.10.0 S3.1, TS25.401 V5.10.0 S6, TS25.430 V5.5.0 S5.2.6.2 |
| 81 | | | | | | | |
| BS, CN, RNC, T | Mitsubishi | JP 3636327 | | 28/10/2014 | Wideband Speech Reconstruction Method and Wideband Speech Reconstruction Apparatus | 1, 2 | TS26.190 V6.0.0 S4.4, TS26.190 V6.0.0 S6.1, TS26.190 V6.0.0 S6.3.1, TS26.190 V6.0.0 S6.3.2.2, TS26.190 V6.0.0 S6.3.3, TS26.190 V6.0.0 S8 Fig. 3 |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

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|--|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 82 | | | | | | | |
| BS, CN, RNC, T | Siemens | EP 0971553B1 | BE, DE, ES, FR | 01/07/2019 | Handover of a packet data connection in a mobile network | 1, 15 | TS22.078 V3.2.0 S3, TS23.078 V3.10.0 Fig. 6.1, TS23.078 V3.10.0 Fig. 6.7, TS23.078 V3.10.0 S1, TS23.078 V3.10.0 S3.1, TS23.078 V3.10.0 S6.1.1, TS23.078 V3.10.0 S6.1.2.1, TS23.078 V3.10.0 S6.1.2.2, TS23.078 V3.10.0 S6.4.3, TS23.078 V3.10.0 S6.4.3.1.3, TS23.078 V3.10.0 S6.4.5.2, TS23.078 V3.10.0 S6.5.1, TS23.078 V3.10.0 S6.5.2.4, TS23.078 V3.10.0 S6.5.3.6, TS23.078 V3.10.0 S6.6.1.4.2, TS23.078 V3.10.0 S6.6.3.2.2, TS23.078 V3.10.0 S9.11, TS23.078 V3.10.0 S9.3, TS29.078 V3.10.0 S12.1.7.1.2, TS29.078 V3.10.0 S4.1.1, TS29.078 V3.10.0 S4.1.2, TS29.078 V3.10.0 S5.1 |
| 83 | | | | | | | |
| BS, RNC, T | Siemens | EP 1027773 | DE, ES, FR, GB | 26/10/2018 | Method, Mobile Station and Base Station for Establishing Connections in a Radiocommunications System | 1, 16 | TS25.211 V4.4.0 Fig. 3, TS25.211 V4.4.0 Fig. 4, TS25.211 V4.4.0 S5.2.2.1, TS25.211 V4.4.0 S5.2.2.1.1, TS25.211 V4.4.0 S5.2.2.1.2, TS25.211 V4.4.0 S5.3.3.1, TS25.211 V4.4.0 S5.3.3.7, TS25.214 V4.4.0 S6.1, TS25.331 V4.4.0 S10.3.6.54, TS25.331 V4.4.0 S8.5.7 |
| BS, RNC, T | Siemens | CN ZL98812713.X | | 26/10/2018 | METHOD, MOBILE STATION AND BASE STATION FOR CONNECTION SETUP IN A RADIO COMMUNICATION SYSTEM | 1, 16 | TS25.211 V4.4.0 Fig. 3, TS25.211 V4.4.0 Fig. 4, TS25.211 V4.4.0 S5.2.2.1.1, TS25.211 V4.4.0 S5.3.3.1, TS25.214 V4.4.0 S6.1, TS25.331 V4.4.0 S8.5.7 |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

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|--|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 84 CN, T | Siemens | EP 0978206B1 | ES, FR, GB | 17/04/2018 | METHOD AND COMMUNICATIONS NETWORK FOR THE ADMINISTRATION OF SUPPLEMENTARY SERVICES | 1, 12, 13 | TS23.078 V6.5.0 Fig. 4.1, TS23.078 V6.5.0 S1, TS23.078 V6.5.0 S2, TS23.078 V6.5.0 S3.1, TS23.078 V6.5.0 S3.2, TS23.078 V6.5.0 S4.1.1, TS23.078 V6.5.0 S4.4.5, TS23.078 V6.5.0 S5.1.1, TS23.078 V6.5.0 S5.1.2.1, TS23.078 V6.5.0 S5.2.1.1, TS23.078 V6.5.0 S5.4.1, TS23.078 V6.5.0 S5.5.1.3.1, TS23.078 V6.5.0 S5.5.1.3.2, TS23.078 V6.5.0 S5.5.1.4.1, TS23.078 V6.5.0 S5.5.1.4.2, TS23.078 V6.5.0 S5.5.2.3, TS23.078 V6.5.0 S5.5.2.3.1, TS23.078 V6.5.0 S5.5.2.4.1, TS23.090 V6.0.0 S1, TS23.090 V6.0.0 S2, TS23.090 V6.0.0 S6.1, TS23.090 V6.0.0 S6.2.2, TS23.090 V6.0.0 S6.2.3, TS29.002 V6.9.0 Fig. 22.9.5/1, TS29.002 V6.9.0 S1, TS29.002 V6.9.0 S2, TS29.002 V6.9.0 S22.9.2, TS29.002 V6.9.0 S22.9.3, TS29.002 V6.9.0 S22.9.4, TS29.002 V6.9.0 S22.9.5 |
| 85 BS, CN, RNC, T | Fujitsu | JP 3571709 | | 28/10/2014 | VOICE ENCODING AND VOICE DECODING APPARATUS | 1 | TS26.071 V4.0.0 S1, TS26.071 V4.0.0 S4 Fig. 1, TS26.071 V4.0.0 S8, TS26.071 V4.0.0 S9, TS26.092 V4.0.0 S1, TS26.092 V4.0.0 S3.1, TS26.092 V4.0.0 S4, TS26.092 V4.0.0 S5.1, TS26.092 V4.0.0 S6, TS45.009 V4.1.0 S2, TS45.009 V4.1.0 S3.1.1 Fig. 1 |
| 86 BS, T | Fujitsu | JP 3168063 | | 18/05/2012 | Spectrum Spread Communication Apparatus and Communication Method | 2 | TS25.201 V3.4.0 S4.1.1, TS25.212 V3.11.0 S4.2.10, TS25.212 V3.11.0 S4.2.7.1.1, TS25.212 V3.11.0 S4.2.7.2, TS25.212 V3.11.0 S4.5.4, TS25.213 V3.9.0 S4.2 Fig. 1, TS25.213 V3.9.0 S4.4.2 Fig. 7, TS25.213 V3.9.0 S5.1 Fig. 8, TS25.213 V3.9.0 S5.1 Fig. 9, TS25.306 V3.10.0 S5.2.2.1, TS25.306 V3.12.0 Fig. 9 |

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|--|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 87 | | | | | | | |
| BS, T | Fujitsu | EP 1096823 | DE, FR, GB, IT | 28/04/2019 | Downlink transmission selection in cellular mobile communications networks | 9 | TS25.214 V3.12.0 S5.2.1.4, TS25.214 V3.12.0 S5.2.1.4.1, TS25.214 V3.12.0 S5.2.1.4.3, TS25.214 V3.12.0 S5.2.1.4.4, TS25.214 V3.12.0 S5.2.1.4.5, TS25.214 V3.12.0 Table 6 |
| BS, T | Fujitsu | KR 10-0627769 | | 28/04/2019 | Downlink transmission selection in cellular mobile communications networks. | 9 | TS25.214 V3.12.0 S5.2.1.4.1, TS25.214 V3.12.0 S5.2.1.4.3, TS25.214 V3.12.0 S5.2.1.4.4, TS25.214 V3.12.0 S5.2.1.4.5, TS25.214 V3.12.0 Table 6 |
| BS, T | Fujitsu | CN 200410002839 | | 28/04/2019 | Downlink transmission selection in cellular mobile communications networks. | 9 | TS25.214 V3.12.0 S5.2.1.4, TS25.214 V3.12.0 S5.2.1.4.1, TS25.214 V3.12.0 S5.2.1.4.3, TS25.214 V3.12.0 S5.2.1.4.4, TS25.214 V3.12.0 S5.2.1.4.5, TS25.214 V3.12.0 Table 6 |
| 88 | | | | | | | |
| BS, RNC, T | Fujitsu | JP 2548763 | | 25/01/2008 (Expired) | CHANNEL CHANGING SYSTEM | 3 | TR25.990 V3.0.0 S5.2, TS23.002 V3.6.0 S4.2.2.1, TS23.002 V3.6.0 S4.2.2.2, TS23.002 V3.6.0 S4.4.2, TS23.002 V3.6.0 S5.2.2 Fig.3, TS25.104 V3.12.0 S5.2, TS25.104 V3.12.0 S5.4.1, TS25.133 V3.20.0 S5.2, TS25.133 V3.20.0 S5.2.1, TS25.133 V3.20.0 S5.2.2 |

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|---|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 89 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | JP 2855172 | | 23/02/2016 | VARIABLE RATE TRANSMISSION METHOD, AND TRANSMITTER AND RECEIVER EMPLOYING THE SAME | 1, 32 | TS25.211 V5.0.0 Fig. 10, TS25.211 V5.0.0 S5.3.2, TS25.212 V5.0.0 Annex A.1.2, TS25.212 V5.0.0 Fig. 2, TS25.212 V5.0.0 Fig. A.1, TS25.212 V5.0.0 S4.2, TS25.212 V5.0.0 S4.2.1.1, TS25.212 V5.0.0 S4.2.7, TS25.212 V5.0.0 S4.2.7.2, TS25.212 V5.0.0 S4.2.9 |
| T | NTT DoCoMo | EP 0758168 | DE, FR, GB, IT, SE | 23/02/2016 | VARIABLE RATE TRANSMITTING METHOD, AND TRANSMITTER AND RECEIVER UNIT | 15, 18 | TS25.201 V3.4.0 S4.2.1, TS25.212 V3.11.0 Annex A Fig. A.1, TS25.212 V3.11.0 Annex A Fig. A.2, TS25.212 V3.11.0 Annex A Sec. A.1.2 |
| BS, RNC, T | NTT DoCoMo | US 5896374 | | 23/02/2016 | Variable Rate Transmission Method, Transmitter and Receiver Using The Same | 12, 31, 47 | TS25.201 V3.4.0 S4.1.2, TS25.211 V3.12.0 Figure 10, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3.2, TS25.211 V3.12.0 S5.3.3.2, TS25.211 V3.12.0 Table 12, TS25.211 V3.12.0 Table 17, TS25.212 V3.11.0 Annex A.1.2, TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 Fig. A.1, TS25.212 V3.11.0 Fig. A.2, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.1, TS25.212 V3.11.0 S4.2.1.1, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.7.2, TS25.212 V3.11.0 S4.2.9, TS25.213 V3.9.0 Figure 8, TS25.213 V3.9.0 S4.1, TS25.213 V3.9.0 S5.1 |
| BS, RNC, T | NTT DoCoMo | CA 2188455 | | 23/02/2016 | Variable rate transmitting method, transmitter and receiver using the same. | 12, 34 | TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 S5.3.2, TS25.211 V3.12.0 Table 11, TS25.212 V3.11.0 Annex A.1.2, TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 Fig. A.1, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.1, TS25.212 V3.11.0 S4.2.1.1, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.7.2, TS25.212 V3.11.0 S4.2.9, TS25.302 V3.16.0 Fig. 6, TS25.302 V3.16.0 Figure 6, TS25.302 V3.16.0 S7.1.11, TS25.302 V3.16.0 S7.1.5, TS25.302 V3.16.0 S7.1.6, TS25.302 V3.16.0 S7.1.8 |
| T | NTT DoCoMo | EP 0758168 | DE, FR, GB, IT, SE | 23/02/2016 | Variable rate transmitting method, and transmitter and receiver using it. | 11, 13 | TS25.201 V3.4.0 S4.2.1, TS25.212 V3.11.0 A.1.2, TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 Fig. A.1, TS25.212 V3.11.0 Fig. A.2, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.1, TS25.212 V3.11.0 S4.2.1.1, TS25.212 V3.11.0 S4.2.1.2, TS25.212 V3.11.0 S4.2.11, TS25.212 V3.11.0 S4.2.5, TS25.301 V3.11.0 S5.2, TS25.301 V3.11.0 S5.2.2 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 90 | | | | | | | |
| BS, RNC | NTT DoCoMo | JP 3457335 | | 27/05/2019 | ERROR PROTECTION METHOD AND ERROR PROTECTION DEVICE | 1, 4 | TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 S5.3.2, TS25.212 V3.11.0 Fig. 9, TS25.212 V3.11.0 S4.2.1, TS25.212 V3.11.0 S4.2.3, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.8, TS25.212 V3.11.0 S4.3.2, TS25.212 V3.11.0 S4.3.3, TS25.302 V3.16.0 S7.1, TS25.302 V3.16.0 S7.1.1, TS25.302 V3.16.0 S7.1.11, TS25.302 V3.16.0 S7.1.2, TS25.302 V3.16.0 S7.1.6, TS25.302 V3.16.0 S7.1.8, TS25.303 V3.12.0 Fig. 5, TS25.303 V3.12.0 S5.3.1, TS25.303 V3.12.0 S6.2.1.1.1, TS25.331 V3.20.0 S10.2.33, TS25.331 V3.20.0 S10.3.5.1, TS25.331 V3.20.0 S10.3.5.11, TS25.331 V3.20.0 S10.3.5.23, TS25.415 V3.12.0 S3.1, TS34.108 V5.2.0 S6.10.2.4.1.2.2.1.1, TS34.108 V5.2.0 S6.10.2.4.1.38b.2.1.1, TS34.108 V5.2.0 S6.10.2.4.1.38b.2.1.2, TS34.108 V5.2.0 S6.10.2.4.1.4.2.1.1 |
| BS, RNC | NTT DoCoMo | US 6434718 | | 27/05/2019 | Error Protection Method And Error Protection Device | 1, 7 | TS25.211 V3.12.0 S5.3.2, TS25.212 V3.11.0 S4.2.1, TS25.212 V3.11.0 S4.2.3, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.3.3, TS25.302 V3.16.0 S7.1, TS25.302 V3.16.0 S7.1.1, TS25.302 V3.16.0 S7.1.11, TS25.302 V3.16.0 S7.1.2, TS25.302 V3.16.0 S7.1.6, TS25.302 V3.16.0 S7.1.8, TS25.303 V3.12.0 S5.3.1, TS25.303 V3.12.0 S6.2.1.1.1, TS25.331 V3.20.0 S10.2.33, TS25.331 V3.20.0 S10.3.5.1, TS25.331 V3.20.0 S10.3.5.11, TS25.331 V3.20.0 S10.3.5.23, TS25.415 V3.12.0 S3.1, TS34.108 V5.2.0 S6.10.2.4.1.2.2.1.1, TS34.108 V5.2.0 S6.10.2.4.1.38b.2.1.1, TS34.108 V5.2.0 S6.10.2.4.1.38b.2.1.2, TS34.108 V5.2.0 S6.10.2.4.1.4.2.1.1 |
| BS, RNC | NTT DoCoMo | AU 756985 | | 27/05/2019 | Error Protection Method and Error Protection Device | 1 | TS25.211 V3.12.0 S5.3.2, TS25.212 V3.11.0 S4.2.1, TS25.212 V3.11.0 S4.2.11, TS25.212 V3.11.0 S4.2.3, TS25.212 V3.11.0 S4.2.5, TS25.212 V3.11.0 S4.3.3, TS25.302 V3.16.0 S7.1, TS25.302 V3.16.0 S7.1.1, TS25.302 V3.16.0 S7.1.11, TS25.302 V3.16.0 S7.1.2, TS25.302 V3.16.0 S7.1.6, TS25.302 V3.16.0 S7.1.8, TS25.415 V3.12.0 S3.1, TS34.108 V5.5.0 S6.10.2.4.1.38b.2.1.1, TS34.108 V5.5.0 S6.10.2.4.1.38b.2.1.2, TS34.108 V5.5.0 S6.10.2.4.1.4.2.1.1 |
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|--|--------------------------------|----------------------|---|---|---|-------------------------|--|
| BS, RNC | NTT DoCoMo | SG 69837 | | 27/05/2019 | Error Protection Method and Error Protection Device | 1 | TS25.211 V3.12.0 Figure 9, TS25.211 V3.12.0 S5.3.2, TS25.212 V3.11.0 Fig. 9, TS25.212 V3.11.0 S4.1, TS25.212 V3.11.0 S4.2.1, TS25.212 V3.11.0 S4.2.3, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.3.3, TS25.302 V3.16.0 S7.1, TS25.302 V3.16.0 S7.1.1, TS25.302 V3.16.0 S7.1.11, TS25.302 V3.16.0 S7.1.2, TS25.302 V3.16.0 S7.1.6, TS25.302 V3.16.0 S7.1.8, TS25.415 V3.12.0 S3.1, TS34.108 V5.5.0 S6.10.2.4.1.38b.2.1.1, TS34.108 V5.5.0 S6.10.2.4.1.4.2.1.1 |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

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|--|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 91 | | | | | | | |
| BS, T | Mitsubishi | JP 3490097 | | 04/03/2019 | MOBILE COMMUNICATION SYSTEM, RECEIVER, TRANSMITTER AND MOBILE RADIO COMMUNICATION METHOD | 1, 6, 11, 13, 15, 16 | TS25.133 V6.0.0 S8.1.2.5, TS25.133 V6.0.0 S8.1.2.5.2.1, TS25.201 V3.4.0 S4.1.1, TS25.211 V5.4.0 Fig. 9, TS25.211 V5.4.0 S1, TS25.211 V5.4.0 S5.3.2, TS25.212 V5.3.0 Fig. 2, TS25.212 V5.3.0 S1, TS25.212 V5.3.0 S4.2, TS25.212 V5.3.0 S4.2.5, TS25.212 V5.3.0 S4.2.5.2, TS25.212 V5.3.0 S4.2.7, TS25.212 V5.3.0 S4.2.7.2, TS25.212 V5.3.0 S4.4, TS25.212 V5.3.0 S4.4 Fig. 11, TS25.215 V5.6.0 Cover page, TS25.215 V5.6.0 Fig. 1, TS25.215 V5.6.0 S6.1.1.1, TS25.215 V5.6.0 S6.1.1.2, TS45.001 V4.4.0 Fig. 1, TS45.001 V4.4.0 Fig. 3, TS45.001 V4.4.0 S5.1, TS45.001 V4.4.0 S5.2 |
| BS, T | Mitsubishi | CN 1179593C | | 04/03/2019 | MOBILE COMMUNICATION SYSTEM, RECEIVER, TRANSMITTER AND MOBILE RADIO COMMUNICATION METHOD | 1, 5, 6, 7, 8, 9 | TS25.133 V6.6.0 S8.1.2.5 Tab. 8.7, TS25.133 V6.6.0 S8.1.2.5.2.1, TS25.211 V5.4.0 S5.3.2 Fig. 9, TS25.212 V5.3.0 S4 Fig. 2, TS25.212 V5.3.0 S4.2, TS25.212 V5.3.0 S4.2.12.2 Fig. 2, TS25.212 V5.3.0 S4.2.5.1 Tab. 4, TS25.212 V5.3.0 S4.2.5.2, TS25.212 V5.3.0 S4.4 Fig. 11, TS25.215 V5.6.0 S6.1.1.1, TS25.215 V5.6.0 S6.1.1.2 Fig. 1, TS45.001 V4.4.0 S5.1, TS45.001 V4.4.0 S5.2 Fig. 3 |
| T | Mitsubishi | US 7206302 | | 04/03/2019 | Mobile radio communication system, communication apparatus for mobile radio communication system and mobile radio communication method | 1 | TS25.133 V6.0.0 S8.1.2.5, TS25.133 V6.0.0 S8.1.2.5.2.1, TS25.201 V3.4.0 S4.1.1, TS25.211 V5.4.0 Fig. 9, TS25.211 V5.4.0 S1, TS25.211 V5.4.0 S5.3.2, TS25.212 V5.3.0 Fig. 11, TS25.212 V5.3.0 Fig. 2, TS25.212 V5.3.0 S1, TS25.212 V5.3.0 S4.2, TS25.212 V5.3.0 S4.2.5, TS25.212 V5.3.0 S4.2.5.1, TS25.212 V5.3.0 S4.2.5.2, TS25.212 V5.3.0 S4.2.7, TS25.212 V5.3.0 S4.2.7.2, TS25.212 V5.3.0 S4.4, TS25.215 V5.6.0 Cover page, TS25.215 V5.6.0 Fig. 1, TS25.215 V5.6.0 S6.1.1.1, TS25.215 V5.6.0 S6.1.1.2, TS45.001 V4.4.0 Fig. 1, TS45.001 V4.4.0 Fig. 3, TS45.001 V4.4.0 S5.1, TS45.001 V4.4.0 S5.2 |

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|--|--------------------------------|----------------------|---|---|---|-------------------------|--|
| T | Mitsubishi | EP 1610581 | DE, FR, GB | 04/03/2019 | Receiving method applied in a mobile radio communication system for observing frequencies of another system | 1 | TR21.900 V3.6.0 S4.0, TR21.900 V3.6.0 Table 1, TS25.133 V6.0.0 S8.1.2.5, TS25.133 V6.0.0 S8.1.2.5.2.1, TS25.133 V6.0.0 Table 8.7, TS25.201 V3.4.0 S4.1.1, TS25.211 V5.4.0 Fig. 9, TS25.211 V5.4.0 S1, TS25.211 V5.4.0 S5.3.2, TS25.212 V5.3.0 Fig. 11, TS25.212 V5.3.0 Fig. 2, TS25.212 V5.3.0 S4.2, TS25.212 V5.3.0 S4.2.5, TS25.212 V5.3.0 S4.2.5.1, TS25.212 V5.3.0 S4.2.5.2, TS25.212 V5.3.0 S4.2.7, TS25.212 V5.3.0 S4.2.7.2, TS25.212 V5.3.0 S4.4, TS25.212 V5.3.0 Table 4, TS25.215 V5.6.0 Fig. 1, TS25.215 V5.6.0 S6.1.1.1, TS25.215 V5.6.0 S6.1.1.2, TS45.001 V4.4.0 Fig. 1, TS45.001 V4.4.0 Fig. 3, TS45.001 V4.4.0 S5.1, TS45.001 V4.4.0 S5.2 |
| BS, T | Mitsubishi | EP 1610578 | DE, FR, GB | 04/03/2019 | System and transmitter applied in a mobile radio communication system for observing frequencies of another system | 1 | TR21.900 V3.6.0 cover page, TS25.133 V3.17.0, TS25.133 V6.0.0 S8.1.2.5, TS25.133 V6.0.0 S8.1.2.5.2.1 Table 8.7, TS25.201 V3.4.0 S4.1.1, TS25.211 V5.4.0 S1, TS25.211 V5.4.0 S5.3.2 Fig. 9, TS25.212 V5.3.0 S4.2 Figure 2, TS25.212 V5.3.0 S4.2.5, TS25.212 V5.3.0 S4.2.5.1, TS25.212 V5.3.0 S4.2.5.2 Table 4, TS25.212 V5.3.0 S4.2.7, TS25.212 V5.3.0 S4.2.7.2, TS25.212 V5.3.0 S4.4 Fig. 11, TS25.215 V5.6.0 S6.1.1.1, TS25.215 V5.6.0 S6.1.1.2 Fig. 1, TS45.001 V4.4.0 Fig. 1, TS45.001 V4.4.0 Fig. 3, TS45.001 V4.4.0 S5.1, TS45.001 V4.4.0 S5.2 |
| BS, T | Mitsubishi | US 7218646 | | 04/03/2019 | Mobile radio communication system, communication apparatus for mobile radio communication system, and mobile radio communication method | 1 | TS25.133 V6.0.0 S8.1.2.5, TS25.133 V6.0.0 S8.1.2.5.2.1, TS25.133 V6.0.0 Table 8.7, TS25.201 V4.3.0 S4.1.1, TS25.211 V5.4.0 Fig. 9, TS25.211 V5.4.0 S5.3.2, TS25.212 V5.3.0 Fig. 11, TS25.212 V5.3.0 Fig. 2, TS25.212 V5.3.0 S4.2, TS25.212 V5.3.0 S4.2.5.1, TS25.212 V5.3.0 S4.2.5.2, TS25.212 V5.3.0 S4.2.7, TS25.212 V5.3.0 S4.2.7.2, TS25.212 V5.3.0 S4.4, TS25.212 V5.3.0 Table 4, TS25.215 V5.6.0 Fig. 1, TS25.215 V5.6.0 S6.1.1.1, TS25.215 V5.6.0 S6.1.1.2, TS45.001 V4.4.0 Fig. 1, TS45.001 V4.4.0 Fig. 3, TS45.001 V4.4.0 S5.1, TS45.001 V4.4.0 S5.2 |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

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|---|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 92 | | | | | | | |
| BS, T | Mitsubishi | EP 0996301B1 | DE, ES, FI, FR, GB, IT, PT, SE | 04/03/2019 | MOBILE RADIO COMMUNICATION SYSTEM, COMMUNICATION APPARATUS FOR MOBILE RADIO COMMUNICATION SYSTEM, AND MOBILE RADIO COMMUNICATION METHOD | 1, 3, 4, 5, 6, 7 | TS25.133 V6.0.0 Table 8.7, TS25.201 V3.4.0 S4.1.1, TS25.211 V5.4.0 Fig. 9, TS25.211 V5.4.0 S5.3.2, TS25.212 V5.3.0 Fig. 2, TS25.212 V5.3.0 S1, TS25.212 V5.3.0 S4.2, TS25.212 V5.3.0 S4.2.12.2, TS25.212 V5.3.0 S4.2.5.1, TS25.212 V5.3.0 S4.2.5.2, TS25.212 V5.3.0 S4.4, TS25.212 V5.3.0 S4.4 Fig. 11, TS25.212 V5.3.0 Table 4, TS25.215 V5.6.0 Fig. 1, TS25.215 V5.6.0 S6.1.1.1, TS25.215 V5.6.0 S6.1.1.2, TS45.001 V4.4.0 Fig. 3, TS45.001 V4.4.0 S5.1, TS45.001 V4.4.0 S5.2 |
| 93 | | | | | | | |
| BS, RNC, T | NEC | US 6359864 | | 17/07/2016 | FDD/CDMA TRANSMISSION/RECEPTION SYSTEM | 2, 4 | TS25.211 V3.12.0 S5.3.3.1, TS25.214 V3.12.0 S7, TS25.214 V3.12.0 S7.1 |
| 94 | | | | | | | |
| BS, RNC, T | NEC | JP 3365379 | | 13/12/2019 | Base station selection type transmission power control method and base station | 1, 6, 11 | TS25.214 V3.12.0 S5.2.1.4.1, TS25.214 V3.12.0 S5.2.1.4.3, TS25.214 V3.12.0 S5.2.1.4.4, TS25.214 V3.12.0 S5.2.1.4.5 |
| BS, RNC, T | NEC | US 6847818 | | 31/10/2020 | Transmission power control method and system | 1, 13 | TS25.214 V3.12.0 S5.2.1.4, TS25.214 V3.12.0 S5.2.1.4.1, TS25.214 V3.12.0 S5.2.1.4.3, TS25.214 V3.12.0 S5.2.1.4.4, TS25.214 V3.12.0 S5.2.1.4.5 |
| BS, RNC, T | NEC | KR 10-0353746 | | 31/10/2020 | A transmission power control method and device | 1, 12 | TS25.214 V3.12.0 S5.2.1.4, TS25.214 V3.12.0 S5.2.1.4.1, TS25.214 V3.12.0 S5.2.1.4.3, TS25.214 V3.12.0 S5.2.1.4.4, TS25.214 V3.12.0 S5.2.1.4.5 |
| 95 | | | | | | | |
| BS, CN, RNC, T | Fujitsu | JP 3568255 | | 28/10/2014 | VOICE CODING AND VOICE DECODING APPARATUS | 7 | TS26.071 V4.0.0 Fig. 1, TS26.071 V4.0.0 S1, TS26.071 V4.0.0 S4, TS26.071 V4.0.0 S8, TS26.071 V4.0.0 S9, TS26.090 V4.0.0 S4.3 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 96 | | | | | | | |
| T | Fujitsu | JP 3628013 | | 19/08/2018 | Error-correcting encoding apparatus | 5 | TS25.212 V3.9.0 Fig. 1, TS25.212 V3.9.0 Fig. 4, TS25.212 V3.9.0 Fig. 5, TS25.212 V3.9.0 S4.2, TS25.212 V3.9.0 S4.2.2.2, TS25.212 V3.9.0 S4.2.3.2.1, TS25.212 V3.9.0 S4.2.7, TS25.212 V3.9.0 S4.2.7.1, TS25.212 V3.9.0 S4.2.7.1.1, TS25.212 V3.9.0 S4.2.7.1.2, TS25.212 V3.9.0 S4.2.7.1.2.2, TS25.212 V3.9.0 S4.2.7.3, TS25.212 V3.9.0 S4.2.7.3.1, TS25.212 V3.9.0 S4.2.7.3.2 |
| T | Fujitsu | CN 03128588 | | 19/08/2019 | Error-correcting encoding apparatus. | 5 | TS25.212 V3.9.0 Fig. 1, TS25.212 V3.9.0 Fig. 4, TS25.212 V3.9.0 Fig. 5, TS25.212 V3.9.0 S3.2, TS25.212 V3.9.0 S4.2, TS25.212 V3.9.0 S4.2.2.2, TS25.212 V3.9.0 S4.2.3.2.1, TS25.212 V3.9.0 S4.2.7, TS25.212 V3.9.0 S4.2.7.1.1, TS25.212 V3.9.0 S4.2.7.1.2, TS25.212 V3.9.0 S4.2.7.1.2.2, TS25.212 V3.9.0 S4.2.7.3, TS25.212 V3.9.0 S4.2.7.3.1, TS25.212 V3.9.0 S4.2.7.3.2 |
| 97 | | | | | | | |
| T | Fujitsu | JP 3621688 | | 09/09/2012 | Mobile Communication Terminal and Speech Channel Control Method | 8 | TS25.101 V6.8.0 S5.1, TS25.101 V6.8.0 S5.2, TS25.101 V6.8.0 S5.4.3, TS25.211 V4.2.0 S5.3.2, TS25.211 V4.2.0 S5.3.3, TS25.211 V4.2.0 S5.3.3.3, TS25.211 V4.2.0 S5.3.3.4, TS25.211 V4.2.0 S6.1 Fig. 27, TS25.301 V3.11.0 S5.3.1.1.1 Fig. 3, TS25.301 V3.11.0 S5.3.1.2.2, TS25.303 V6.3.0 S6.4.7, TS25.331 V6.6.0 S10.2.22, TS25.331 V6.6.0 S10.3.3.36 |
| 98 | | | | | | | |
| T | Fujitsu | JP 3629028 | | 07/01/2019 | Spread communication system and mobile station thereof | 1 | TS25.211 V3.12.0 Fig. 13, TS25.211 V3.12.0 S1, TS25.211 V3.12.0 S5, TS25.211 V3.12.0 S5.3.3.1, TS25.214 V3.12.0 S4.1, TS25.214 V3.12.0 S4.2, TS25.304 V3.14.0 S5.2.3, TS25.304 V3.14.0 S5.2.3.1.1, TS25.304 V3.14.0 S5.2.3.1.2 |
| T | Fujitsu | EP 1018845 | DE, FR, GB | 14/12/2019 | Site Diversity System, Base Station, Mobile Station, and Communication Control Method | 1 | TS25.211 V3.12.0 Fig. 13, TS25.211 V3.12.0 S1, TS25.211 V3.12.0 S5, TS25.211 V3.12.0 S5.3.3.1, TS25.214 V3.12.0 S4.1, TS25.214 V3.12.0 S4.2, TS25.304 V3.14.0 S5.2.3, TS25.304 V3.14.0 S5.2.3.1.1, TS25.304 V3.14.0 S5.2.3.1.2 |
| T | Fujitsu | US 7436879 | | 02/12/2019 | Spread communication system and mobile station thereof. | 1 | TS25.211 V2.12.0 Figure 13, TS25.211 V2.12.0 S5.3.3.1, TS25.214 V3.12.0 S4.1, TS25.214 V3.12.0 S4.2, TS25.304 V3.14.0 S5.2.3.1.1, TS25.304 V3.14.0 S5.2.3.1.2 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 99 | | | | | | | |
| BS, CN, RNC, T | Fujitsu | JP 3660676 | | 28/10/2014 | VOICE ENCODING AND VOICE DECODING APPARATUS | 3 | TS26.071 V4.0.0 S4 Fig. 1, TS26.071 V4.0.0 S8, TS26.071 V4.0.0 S9, TS26.090 V4.0.0 Fig. 4, TS26.090 V4.0.0 S3.2, TS26.090 V4.0.0 S4.3, TS26.090 V4.0.0 S6, TS26.090 V4.0.0 S6.1, TS26.092 V4.0.0 S5, TS26.092 V4.0.0 S5.1, TS45.009 Foreword, TS45.009 V4.1.0 Fig. 1, TS45.009 V4.1.0 S2, TS45.009 V4.1.0 S3.1.1 |
| 100 | | | | | | | |
| BS, RNC | NTT DoCoMo | JP 3441922 | | 12/06/2017 | Method and Apparatus for Signal Transmission in CDMA Mobile Communication System | 1, 13 | TS25.201 V5.0.0 S4.2.1, TS25.201 V5.0.0 S5.3, TS25.211 V5.0.0 S5.3.2, TS25.212 V5.0.0 Fig. 2, TS25.212 V5.0.0 S4.2, TS25.212 V5.0.0 S4.2.1.1, TS25.212 V5.0.0 S4.2.12, TS25.212 V5.0.0 S4.2.12.2, TS25.212 V5.0.0 S4.2.9, TS25.212 V5.0.0 S4.2.9.1, TS25.212 V5.0.0 S4.2.9.2, TS25.213 V5.0.0 S5.3.2, TS25.214 V5.0.0 S4.3.1.2 |
| BS, RNC | NTT DoCoMo | US 6026279 | | 12/06/2017 | Method and apparatus for signal transmission in CDMA mobile communication system | 1, 13 | TS25.201 V3.4.0 S4.2.1, TS25.201 V3.4.0 S5.3, TS25.211 V3.12.0 S5.3.2, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.1.1, TS25.212 V3.11.0 S4.2.12, TS25.212 V3.11.0 S4.2.12.2, TS25.212 V3.11.0 S4.2.9, TS25.212 V3.11.0 S4.2.9.1, TS25.212 V3.11.0 S4.2.9.2, TS25.214 V3.12.0 S4.3.1.2 |
| BS, RNC | NTT DoCoMo | EP 0813317 | DE, FR, GB, IT, SE | 12/06/2017 | Method and apparatus for signal transmission in CDMA mobile communication system | 1, 13 | TS25.201 V3.4.0 S4.2.1, TS25.201 V3.4.0 S5.3, TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3.2, TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.1.1, TS25.212 V3.11.0 S4.2.12, TS25.212 V3.11.0 S4.2.12.2, TS25.212 V3.11.0 S4.2.9, TS25.212 V3.11.0 S4.2.9.1, TS25.212 V3.11.0 S4.2.9.2, TS25.213 V3.9.0 S5.3.2, TS25.214 V3.12.0 S4.3.1.2 |
| 101 | | | | | | | |
| BS, RNC, T | NEC | JP 3120809 | | 30/10/2010 | A handoff method of mobile communication systems and a mobile terminal | 4, 8 | TS25.101 V3.17.0 S8.7.1, TS25.331 V3.21.0 S14.1.2.1, TS25.331 V3.21.0 S14.1.2.3, TS25.331 V3.21.0 S14.1.2.5, TS25.331 V3.21.0 S14.2.1, TS25.402 V3.10.0 Fig. 15, TS25.402 V3.10.0 S8.2.1 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 102 | | | | | | | |
| BS, RNC, T | NEC | JP 3381783 | | 03/03/2019 | Method of controlling transmission power in a cellular type mobile communication system, base station, control station and mobile station | 2, 24 | TS23.002 V3.6.0 Fig. 1, TS23.002 V3.6.0 S4.2.2.2, TS23.002 V3.6.0 S4.3, TS23.002 V3.6.0 S5.1, TS25.214 V3.12.0 S5.2.1.2.1, TS25.214 V3.12.0 S5.2.1.2.2, TS25.433 V3.14.2 S8.3.7.2 |
| BS, RNC, T | NEC | US 6351651 | | 03/03/2019 | Method of controlling transmission power in a cellular type mobile communication system | 1, 47 | TS23.002 V3.6.0 Fig. 1, TS23.002 V3.6.0 S4.2.2, TS23.002 V3.6.0 S4.2.2.2, TS23.002 V3.6.0 S4.3, TS23.002 V3.6.0 S5.1, TS25.214 V3.12.0 S5.2.1.2.1, TS25.214 V3.12.0 S5.2.1.2.2, TS25.433 V3.14.2 S8.3.7.1, TS25.433 V3.14.2 S8.3.7.2 |
| 103 | | | | | | | |
| BS, RNC, T | NEC | JP 3473555 | | 30/06/2020 | Transmission power control system, control method, base station, control station and storage medium | 1, 12, 23 | TS23.002 V3.6.0 Fig. 1, TS23.002 V3.6.0 S5.1, TS25.214 V3.12.0 S5.2.1.2.1, TS25.214 V3.12.0 S5.2.1.2.2, TS25.433 V3.14.2 Fig. 37, TS25.433 V3.14.2 S8.3.7.2, TS25.433 V3.14.2 S9.1.51, TS25.433 V3.14.2 S9.2.2.B |
| BS, RNC, T | NEC | US 7072681 | | 25/06/2021 | Transmission power balance adjustment system and method for cellular communication systems | 2, 4, 6 | TS23.002 V3.6.0 Fig. 1, TS23.002 V3.6.0 S5.1, TS25.214 V3.12.0 S5.2.1.2.1, TS25.214 V3.12.0 S5.2.1.2.2, TS25.402 V3.10.0 S5, TS25.433 V3.13.2 S9.2.2.B, TS25.433 V3.14.2 Fig. 37, TS25.433 V3.14.2 S8.3.7.2, TS25.433 V3.14.2 S9.1.51 |
| 104 | | | | | | | |
| BS, RNC | NTT DoCoMo | JP 3224346 | | 24/07/2016 | Radio Channel Configuration Method in CDMA Mobile communication System | 1 | TS25.201 V3.4.0 S4.2.1, TS25.301 V3.11.0 S5.3.1.1.1, TS25.301 V3.11.0 S5.3.1.1.2.2, TS25.301 V3.11.0 S5.3.5.14, TS25.301 V3.11.0 S5.3.5.17, TS34.108 V3.11.0 S6.10.2.2, TS34.108 V5.5.0 S6.10.2.1, TS34.108 V5.5.0 S6.10.2.4.1.4.2.1.3 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 105 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | JP 3445279 | | 23/06/2017 | DATA TRANSMITTING METHOD, DATA TRANSMITTING SYSTEM AND TRANSMITTER AND RECEIVER | 1, 4 | TS25.211 V5.0.0 Fig. 10, TS25.211 V5.0.0 S5.3.2, TS25.211 V5.0.0 Table 12, TS25.212 Fig. A.2, TS25.212 V5.0.0 Annex A.1.2, TS25.212 V5.0.0 Fig. A.1, TS25.212 V5.0.0 S4.2, TS25.212 V5.0.0 S4.2.1.1, TS25.212 V5.0.0 S4.2.2, TS25.212 V5.0.0 S4.2.3.1, TS25.212 V5.0.0 S4.2.5.4, TS25.212 V5.0.0 S4.2.7, TS25.212 V5.0.0 S4.2.7.2, TS25.212 V5.0.0 S4.2.9.1, TS25.212 V5.0.0 S4.3, TS25.212 V5.0.0 S4.3.1, TS25.301 V5.0.0 S5.2.2, TS25.302 V5.0.0 Fig. 6, TS25.302 V5.0.0 S7.1.5, TS25.302 V5.0.0 S7.1.7 |
| BS, RNC, T | NTT DoCoMo | US 6108384 | | 23/06/2017 | DATA TRANSMISSION METHOD, DATA TRANSMITTING SYSTEM AND TRANSMITTER AND RECEIVER | 1, 4, 13, 14 | TS25.211 V3.12.0 S5.3.2, TS25.212 V3.11.0 Annex A.1.2, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.1.1, TS25.212 V3.11.0 S4.2.2, TS25.212 V3.11.0 S4.2.3, TS25.212 V3.11.0 S4.2.3.1, TS25.212 V3.11.0 S4.2.5.4, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.7.2, TS25.212 V3.11.0 S4.2.9.1, TS25.212 V3.11.0 S4.3, TS25.212 V3.11.0 S4.3.1, TS25.301 V3.11.0 S5.2.2, TS25.302 V3.16.0 S7, TS25.302 V3.16.0 S7.1.7 |
| BS, RNC, T | NTT DoCoMo | EP 0866589 | DE, FR, GB, IT, SE | 23/06/2017 | Data transmitting method, data transmitting system, transmitter, and receiver | 1, 6, 11 | TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 S5.3.2, TS25.212 V3.11.0 Annex A.1.2, TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 Fig. A.1, TS25.212 V3.11.0 Fig. A.2, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.1.1, TS25.212 V3.11.0 S4.2.2, TS25.212 V3.11.0 S4.2.3, TS25.212 V3.11.0 S4.2.3.1, TS25.212 V3.11.0 S4.2.5.4, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.7.2, TS25.212 V3.11.0 S4.2.9.1, TS25.212 V3.11.0 S4.3.1, TS25.302 V3.16.0 Figure 6, TS25.302 V3.16.0 S7.1.7 |
| 106 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | JP 2912884 | | 16/12/2016 | Multiple-access method, Mobile Station and Base Station for CDMA Mobile Communication System | 4, 7, 13, 16 | TS25.201 V5.0.0 S4.2.1, TS25.211 V5.0.0 S5.2.2, TS25.211 V5.0.0 S5.2.2.1, TS25.211 V5.0.0 S5.2.2.1.1, TS25.211 V5.0.0 S5.2.2.1.2, TS25.211 V5.0.0 S5.2.2.1.3, TS25.211 V5.0.0 S5.3.3.3, TS25.211 V5.0.0 S7.3, TS25.213 V5.0.0 S4.2.2.2, TS25.213 V5.0.0 S4.3.1.3, TS25.213 V5.0.0 S4.3.3.1, TS25.213 V5.0.0 S4.3.3.3, TS25.214 V5.0.0 S6.1, TS25.331 V5.0.0 S10.2.48.8.8, TS25.331 V5.0.0 S10.3.6.2, TS25.331 V5.0.0 S10.3.6.55 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|--|--------------------------------|----------------------|---|---|---|--------------------------------|--|
| 107 | | | | | | | |
| T | Sharp | EP 1067706 | DE, ES, FR, GB, IT | 31/08/2012 | Method for improving performances of a mobile radiocommunication system using convergence assessment of power control loop * Expiry date of right to license: 31 August 2012 | 1, 21 | TS25.331 V6.7.0 S14.9, TS25.331 V6.7.0 S14.9.1, TS25.401 V6.7.0 S7.2.4.8, TS25.401 V6.7.0 S7.2.4.8.2, TS25.401 V6.7.0 S7.2.4.8.4 |
| T | Sharp | US 6430398 | | 31/08/2012 | Method for improving performance of a mobile radiocommunication system using power control * Expiry date of right to license: 31 August 2012 | 1, 3, 4, 5, 11, 12, 13, 23, 25 | TS25.201 V6.2.0 S4.2, TS25.201 V6.2.0 S4.2.1, TS25.331 V6.6.0 S14.9, TS25.331 V6.6.0 S14.9.1, TS25.401 V6.7.0 S7.2.4.8, TS25.401 V6.7.0 S7.2.4.8.2, TS25.401 V6.7.0 S7.2.4.8.4 |
| T | Sharp | CN 100391267 | | 31/08/2012 | Method for improving performance of mobile radio communication system using power control. * Expiry date of right to license: 31 August 2012 | 1, 3 | TS25.331 V6.6.0 S14.9.1, TS25.401 V6.7.0 S7.2.4.8, TS25.401 V6.7.0 S7.2.4.8.2, TS25.401 V6.7.0 S7.2.4.8.4 |

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|--|--------------------------------|----------------------|---|---|---|---|---|
| 108 | | | | | | | |
| T | Sharp | EP 1069704 | DE, ES, FR, GB, IT | 31/08/2012 | Method for improving mobile radiocommunication system performances using a power control algorithm * Expiry date of right to license: 31 August 2012 | 1, 22 | TS25.212 V6.6.0 S4.4, TS25.212 V6.6.0 S4.4.3.2, TS25.214 V6.7.0 S5.2.1.3, TS25.331 V6.6.0 S14.9, TS25.331 V6.6.0 S14.9.1, TS25.331 V6.6.0 S14.9.2, TS25.401 V6.7.0 S7, TS25.401 V6.7.0 S7.2.4.8, TS25.401 V6.7.0 S7.2.4.8.2, TS25.401 V6.7.0 S7.2.4.8.4 |
| T | Sharp | AU 763926 | | 31/08/2012 | Method for improving mobile radiocommunication system performances using a power control algorithm * Expiry date of right to license: 31 August 2012 | 1, 3, 6, 7, 8, 10, 11, 23 | TS25.201 V6.2.0 S4.2.1, TS25.212 V6.6.0 Figure 15, TS25.212 V6.6.0 S4.4.3.2, TS25.212 V6.6.0 S4.4.4, TS25.214 V6.7.0 S5.2.1.3, TS25.331 V6.6.0 S10.3.6.33, TS25.331 V6.6.0 S14.9.1, TS25.331 V6.6.0 S14.9.2, TS25.401 V6.7.0 S7.2.4.8, TS25.401 V6.7.0 S7.2.4.8.2, TS25.401 V6.7.0 S7.2.4.8.4 |
| T | Sharp | US 6549785 | | 31/08/2012 | Method for improving performances of a mobile radiocommunication system using a power control algorithm * Expiry date of right to license: 31 August 2012 | 1, 6, 7, 8, 11, 13, 33, 38 | TS25.201 V6.2.0 S4.2, TS25.201 V6.2.0 S4.2.1, TS25.212 V6.6.0 S4.4, TS25.212 V6.6.0 S4.4.3.2, TS25.214 V6.7.0 S5.2.1.3, TS25.331 V6.6.0 S10.3.6.33, TS25.331 V6.6.0 S14.9, TS25.331 V6.6.0 S14.9.1, TS25.331 V6.6.0 S14.9.2, TS25.401 V6.7.0 S7.2.4.8, TS25.401 V6.7.0 S7.2.4.8.2, TS25.401 V6.7.0 S7.2.4.8.4 |
| T | Sharp | CN 1238976 | | 31/08/2012 | Method for improving mobile radiocommunication system performances using a power control algorithm * Expiry date of right to license: 31 August 2012 | 1, 3, 6, 7, 8, 10, 11 | TS25.201 V6.2.0 S4.2.1, TS25.212 V6.6.0 S4.4.3.2, TS25.214 V6.7.0 S5.2.1.3, TS25.331 V6.6.0 S10.3.6.33, TS25.331 V6.6.0 S14.9, TS25.331 V6.6.0 S14.9.1, TS25.331 V6.6.0 S14.9.2, TS25.401 V6.7.0 S7.2.4.8, TS25.401 V6.7.0 S7.2.4.8.2, TS25.401 V6.7.0 S7.2.4.8.4 |
| T | Sharp | KR 0668541 | | 31/08/2012 | Method for improving performances of a mobile radiocommunication systems using a power control algorithm * Expiry date of right to license: 31 August 2012 | 1, 3, 6, 7, 8, 10, 27, 29, 32, 41, 46, 78, 79 | TS25.201 V6.2.0 S4.2, TS25.201 V6.2.0 S4.2.1, TS25.212 V6.6.0 S4.4, TS25.212 V6.6.0 S4.4.3.2, TS25.214 V6.7.0 S5.2.1.3, TS25.331 V6.6.0 S10.3.6.33, TS25.331 V6.6.0 S14.9, TS25.331 V6.6.0 S14.9.1, TS25.331 V6.6.0 S14.9.2, TS25.331 V6.6.0 S8.1.1, TS25.331 V6.6.0 S8.1.1.1, TS25.401 V6.7.0 S7.2.4.8, TS25.401 V6.7.0 S7.2.4.8.2, TS25.401 V6.7.0 S7.2.4.8.4 |
| T | Sharp | JP 3967590 | | 31/08/2012 | Method for improving performances of a mobile radio communication system using a power control algorithm * Expiry date of right to license: 31 August 2012 | 1, 3, 4, 6, 8, 14, 16, 17 | TS25.201 V6.2.0 S4.2.1, TS25.212 V6.6.0 S4.4.3.2, TS25.214 V6.7.0 S5.2.1.3, TS25.331 V6.6.0 S10.3.6.33, TS25.331 V6.6.0 S14.9.1, TS25.331 V6.6.0 S14.9.2, TS25.331 V6.6.0 S8.1.1.1, TS25.401 V6.7.0 S7.2.4.8, TS25.401 V6.7.0 S7.2.4.8.2, TS25.401 V6.7.0 S7.2.4.8.4 |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

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|---|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 109 | | | | | | | |
| T | Sharp | US 5564075 | | 31/08/2012 | Method and system for controlling the power at which an access packet is sent by a mobile in a mobile radio system * Expiry date of right to license: 31 August 2012 | 1 | TS25.133 V6.11.0 S6.3, TS25.211 V6.6.0 S5.2.2.1, TS25.211 V6.6.0 S5.3.3, TS25.211 V6.6.0 S5.3.3.3, TS25.211 V6.6.0 S5.3.3.3.1.1, TS25.211 V6.6.0 S6.1, TS25.214 V6.7.0 S6.1 Fig. 27, TS25.215 V6.4.0 S5.1.1, TS25.331 V6.6.0 S10.3.6.61, TS25.331 V6.6.0 S8.1.1.1.2, TS25.331 V6.6.0 S8.1.1.1.3, TS25.331 V6.6.0 S8.5.7, TS25.401 V6.7.0 S7.2.4.8.5 |
| T | Sharp | EP 0615353 | BE, DE, ES, FR, GB, IT, NL, SE | 31/08/2012 | Method and system for controlling the power of an access packet in a mobile radiocommunication system * Expiry date of the licensing right: 31 August 2012 | 1, 13 | TS25.211 V6.6.0 Fig. 27, TS25.211 V6.6.0 S1, TS25.211 V6.6.0 S5.3.3, TS25.211 V6.6.0 S5.3.3.1, TS25.211 V6.6.0 S5.3.3.1.1, TS25.211 V6.6.0 S5.3.3.3, TS25.211 V6.6.0 S6.1, TS25.214 V6.7.0 S6.1, TS25.215 V6.4.0 S5.1.1, TS25.331 V6.6.0 S10.3.6.61, TS25.331 V6.6.0 S8.1.1.1.3, TS25.331 V6.6.0 S8.5.7, TS25.401 V6.7.0 S7.2.4.8.5 |
| T | Sharp | JP 3720855 | | 31/08/2012 | METHOD FOR CONTROLLING THE POWER OF ACCESS PACKET TRANSMITTED BY MOBILE STATION IN RADIOCOMMUNICATION SYSTEM AND RADIOCOMMUNICATION SYSTEM FOR EXECUTION OF SAID METHOD * Expiry date of right to license: 31 August 2012 | 1 | TS25.133 V6.11.0 S6.3, TS25.133 V6.11.0 S6.3.1, TS25.133 V6.11.0 S6.3.2, TS25.211 V6.6.0 S5.3.3, TS25.211 V6.6.0 S5.3.3.1.1, TS25.211 V6.6.0 S5.3.3.3, TS25.211 V6.6.0 S6.1 Fig. 27, TS25.214 V6.7.0 S6.1, TS25.215 V6.4.0 S5.1.1, TS25.331 V6.6.0 S10.3, TS25.331 V6.6.0 S10.3.6, TS25.331 V6.6.0 S10.3.6.61, TS25.331 V6.6.0 S8.1.1.1.2, TS25.331 V6.6.0 S8.1.1.1.3, TS25.331 V6.6.0 S8.5.7, TS25.401 V6.7.0 S7.2.4.8.5 |
| T | Sharp | AU 673576 | | 31/08/2012 | Access Burst Power Control * Expiry date of right to license: 31 August 2012 | 1, 13 | TS25.211 V6.6.0 S5.3.3, TS25.214 V6.7.0 S6.1, TS25.215 V6.4.0 S5.1.1, TS25.331 V6.6.0 S10.3.6.61, TS25.331 V6.6.0 S8.1.1.1.3, TS25.331 V6.6.0 S8.5.7 |
| 110 | | | | | | | |
| BS, T | Siemens | EP 1112633B1 | DE, ES, FR, GB, IT | 02/09/2019 | METHOD FOR FORMING OR DETECTING A SIGNAL SEQUENCE AND TRANSMITTER UNIT AND RECEIVER UNIT | 1, 10, 11 | TS25.211 V6.0.0 S5.3.3.5, TS25.213 V6.0.0 S5.2.3, TS25.213 V6.0.0 S5.2.3.1 |
| BS, T | Siemens | JP 4149675 | | 02/09/2019 | Method for forming or detecting a signal sequence and transmitter unit and a receiver unit. | 1 | TS25.211 V6.0.0 S5.3.3.5, TS25.213 V6.0.0 S5.2.3.1 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 111 | | | | | | | |
| BS, T | Siemens | EP 1258085B1 | DE, FR, GB, IT | 12/01/2021 | METHOD FOR ADAPTING THE DATA BLOCKS TO BE SUPPLIED TO A TURBO CODER AND A CORRESPONDING COMMUNICATIONS DEVICE | 1, 15 | TS25.212 V6.0.0 S4.2.2.2, TS25.212 V6.0.0 S4.2.3, TS25.212 V6.0.0 S4.2.3.2.3 |
| BS, T | Siemens | JP 3648482 | | 22/02/2020 | Method for adapting the data blocks to be supplied t a turbo coder and a corresponding communications device | 1, 15 | TS25.212 V6.0.0 S4.2.2.2, TS25.212 V6.0.0 S4.2.3, TS25.212 V6.0.0 S4.2.3.2.3 |
| 112 | | | | | | | |
| BS, CN, RNC, T | Mitsubishi | JP 3676801 | | 27/10/2014 | Wideband Speech Reconstruction Method and Wideband Speech Reconstruction Apparatus | 1, 4 | TS26.190 V6.0.0 S4.3, TS26.190 V6.0.0 S4.4 Fig. 3, TS26.190 V6.0.0 S6.1, TS26.190 V6.0.0 S6.3.2.2, TS26.190 V6.0.0 S6.3.3 |
| 113 | | | | | | | |
| BS | Sharp | JP 3151119 | | 27/03/2015 | PARALLEL SPREAD SPECTRUM COMMUNICATION SYSTEM | 1 | TS25.211 V6.6.0 S5.3.2, TS25.212 V6.6.0 S4.2, TS25.212 V6.6.0 S4.2.1, TS25.213 V6.4.0 Fig. 1a, TS25.213 V6.4.0 Fig. 8, TS25.213 V6.4.0 Fig. 9, TS25.213 V6.4.0 S4.2.1.1, TS25.213 V6.4.0 S5.1, TS25.213 V6.4.0 S5.1.2, TS25.213 V6.4.0 S5.1.5, TS25.213 V6.4.0 S5.2.1, TS25.213 V6.4.0 S5.3.2, TS25.306 V6.5.0 S5.1, TS25.331 V6.6.0 S10.3.6.18, TS25.433 V6.7.0 S9.1.36.1, TS25.433 V6.7.0 S9.2.2.29 |
| 114 | | | | | | | |
| T | Sharp | JP 3701300 | | 21/04/2019 | Mobile station | 1, 4 | TS22.140 V6.7.0 S3, TS22.140 V6.7.0 S3.1, TS22.140 V6.7.0 S5, TS22.140 V6.7.0 S5.1, TS23.002 V6.7.0 S4, TS23.002 V6.7.0 S4.2, TS23.002 V6.7.0 S4.3, TS23.140 V6.10.0 S4, TS26.140 V6.2.0 S4, TS26.140 V6.2.0 S4.1, TS26.246 V6.0.0 S10, TS26.246 V6.0.0 S10.2, TS26.246 V6.0.0 S10.8.1, TS26.246 V6.0.0 S4, TS26.246 V6.0.0 S7, TS26.246 V6.0.0 S7.7 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 115 | | | | | | | |
| BS, CN, RNC, T | NEC | JP 3419386 | | 18/05/2020 | Paging system and paging method | 1, 7 | TS25.331 V3.21.0 Annex B, TS25.331 V3.21.0 B.2, TS25.331 V3.21.0 Fig. 8.1.11-1, TS25.331 V3.21.0 Fig. 8.1.2-1, TS25.331 V3.21.0 S7.2, TS25.331 V3.21.0 S7.2.1, TS25.331 V3.21.0 S7.2.2, TS25.331 V3.21.0 S7.2.2.1, TS25.331 V3.21.0 S7.2.2.2, TS25.331 V3.21.0 S7.2.2.3, TS25.331 V3.21.0 S8.1.11, TS25.331 V3.21.0 S8.1.11.1, TS25.331 V3.21.0 S8.1.11.2, TS25.331 V3.21.0 S8.1.2, TS25.331 V3.21.0 S8.1.2.1, TS25.331 V3.21.0 S8.1.2.3, TS25.331 V3.21.0 S8.15.2, TS25.410 V3.8.0 Fig. 4.1, TS25.410 V3.8.0 S4.1, TS25.410 V3.8.0 S4.1.1, TS25.413 V3.14.0 Fig. 16, TS25.413 V3.14.0 S8.15, TS25.413 V3.14.0 S8.15.1, TS25.413 V3.14.0 S8.15.2, TS25.413 V3.14.0 S8.16, TS25.413 V3.14.0 S9.2, TS25.413 V3.14.0 S9.2.1, TS25.413 V3.14.0 S9.2.1.22, TS25.413 V4.14.0 S8.16.1 |
| 116 | | | | | | | |
| BS, CN, RNC, T | NEC | JP 3736533 | | 18/05/2020 | A paging system, a paging method and base station control equipment using the method | 1, 7 | TS25.331 V3.21.0 Fig. 8.1.2-1, TS25.331 V3.21.0 S8.1.2, TS25.331 V3.21.0 S8.1.2.1, TS25.331 V3.21.0 S8.1.2.2, TS25.331 V3.21.0 S8.1.2.3, TS25.331 V3.21.0 S8.16.1, TS25.410 V3.8.0 Fig. 4.1, TS25.410 V3.8.0 S4.1.1, TS25.413 V3.14.0 Fig. 16, TS25.413 V3.14.0 S8.15.1, TS25.413 V3.14.0 S8.15.2, TS25.413 V3.14.0 S9.2.1.22 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|--|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 117 | | | | | | | |
| T | Mitsubishi | EP 1471656B1 | DE, FR, GB | 21/08/2022 | Transmission of Additional Dedicated Physical Control CHannel (ADPCCH) in W-CDMA system | 1 | TS25.211 V5.5.0 S5.2.1, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.308 V5.4.0 S4 |
| T | Mitsubishi | KR 561116 | | 21/08/2022 | Transmission of Additional Dedicated Physical Control Channel (ADPCCH) in W-CDMA system | 1, 11 | TS25.211 V5.5.0 S5.2.1, TS25.213 V5.5.0 Figure 1, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.308 V5.4.0 S3.2, TS25.308 V5.4.0 S4 |
| T | Mitsubishi | US 7102993 | | 21/08/2022 | Mobile station, base station, communication system and communication method | 5 | TS25.211 V5.5.0 Fig. 2A, TS25.211 V5.5.0 S3.2, TS25.211 V5.5.0 S5.2.1, TS25.213 V5.5.0 Figure 1, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.308 V5.4.0 S3.2, TS25.308 V5.4.0 S4 |
| T | Mitsubishi | CN 471096 | | 21/08/2022 | Mobile station and Transmission method | 1 | TS25.201 V5.2.0 Fig 2, TS25.201 V5.2.0 S4.2.6, TS25.211 V5.5.0 Figure 27, TS25.211 V5.5.0 S3.2, TS25.211 V5.5.0 S4.1, TS25.211 V5.5.0 S4.1.1, TS25.211 V5.5.0 S4.1.1.1, TS25.211 V5.5.0 S5.2.1, TS25.211 V5.5.0 S6.1, TS25.212 V5.7.0 Fig 1, TS25.212 V5.7.0 S4.1, TS25.212 V5.7.0 S4.2, TS25.212 V5.7.0 S4.2.10, TS25.212 V5.7.0 S4.2.12, TS25.212 V5.7.0 S4.2.7.1.1, TS25.213 V5.5.0 Fig. 1, TS25.213 V5.5.0 Fig. 7, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.213 V5.5.0 S4.4.1, TS25.213 V5.5.0 S4.4.2, TS25.308 V5.4.0 S3.2, TS25.308 V5.4.0 S4 |
| T | Mitsubishi | HK 1075985 | | 21/08/2022 | Mobile station and Transmission method | 1 | TS25.201 V5.2.0 Fig 2, TS25.201 V5.2.0 S4.2.6, TS25.211 V5.5.0 Figure 27, TS25.211 V5.5.0 S3.2, TS25.211 V5.5.0 S4.1, TS25.211 V5.5.0 S4.1.1, TS25.211 V5.5.0 S4.1.1.1, TS25.211 V5.5.0 S5.2.1, TS25.211 V5.5.0 S6.1, TS25.212 V5.7.0 Fig 1, TS25.212 V5.7.0 S4.1, TS25.212 V5.7.0 S4.2, TS25.212 V5.7.0 S4.2.10, TS25.212 V5.7.0 S4.2.12, TS25.212 V5.7.0 S4.2.7.1.1, TS25.213 V5.5.0 Fig. 7, TS25.213 V5.5.0 Figure 1, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.213 V5.5.0 S4.4.1, TS25.213 V5.5.0 S4.4.2, TS25.308 V5.4.0 S3.2, TS25.308 V5.4.0 S4 |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|---|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 118 | | | | | | | |
| BS, CN, RNC, T | NEC | JP 3179091 | | 30/10/2010 | A handoff method of a mobile communication system and a mobile terminal | 2, 5 | TS25.104 V3.13.0 S5, TS25.104 V3.13.0 S5.4.3, TS25.104 V3.13.0 Tab. 5.1, TS25.133 V3.22.0 S5, TS25.133 V3.22.0 S5.1.1, TS25.133 V3.22.0 S5.1.2.3, TS25.214 V3.12.0 S4, TS25.214 V3.12.0 S4.3.2, TS25.214 V3.12.0 S4.3.2.1, TS25.301 V3.11.0 Fig. 11, TS25.301 V3.11.0 Fig. 12, TS25.301 V3.11.0 S5, TS25.301 V3.11.0 S5.6, TS25.301 V3.11.0 S5.6.1, TS25.303 V3.12.0 Fig. 25, TS25.303 V3.12.0 Fig. 30, TS25.303 V3.12.0 S6, TS25.303 V3.12.0 S6.4.1, TS25.303 V3.12.0 S6.4.4, TS25.331 V3.21.0 Fig. 14.1.2.3-1, TS25.331 V3.21.0 Fig. 14.1.2.5-1, TS25.331 V3.21.0 Fig. 8.2.2-1, TS25.331 V3.21.0 Fig. 8.3.4-1, TS25.331 V3.21.0 S10, TS25.331 V3.21.0 S10.2.1, TS25.331 V3.21.0 S10.2.33, TS25.331 V3.21.0 S10.3.6.36, TS25.331 V3.21.0 S14, TS25.331 V3.21.0 S14.1.1, TS25.331 V3.21.0 S14.1.2, TS25.331 V3.21.0 S14.1.2.1, TS25.331 V3.21.0 S14.1.2.3, TS25.331 V3.21.0 S14.1.2.3 Eq. 2, TS25.331 V3.21.0 S14.1.2.5, TS25.331 V3.21.0 S14.1.2.5 Eq. 2, TS25.331 V3.21.0 S14.1.4, TS25.331 V3.21.0 S14.1.5, TS25.331 V3.21.0 S8, TS25.331 V3.21.0 S8.2.2, TS25.331 V3.21.0 S8.3.4, TS25.401 V3.10.0 Fig. 17, TS25.401 V3.10.0 Fig. 4, TS25.401 V3.10.0 S11, TS25.401 V3.10.0 S11.2.4, TS25.401 V3.10.0 S6, TS25.401 V3.10.0 S7, TS25.401 V3.10.0 S7.2.4.3, TS25.402 V3.10.0 S8, TS25.402 V3.10.0 S8.2.1, TS25.402 V5.0.0 S8.2.1 with Fig. 15 |
| 119 | | | | | | | |
| BS, RNC, T | NEC | JP 3214466 | | 02/09/2018 | A mobile communication system, a communication control method therefore, a base station and a mobile station used therein | 1, 3, 5 | TS25.212 V3.11.0 Fig. 11, TS25.212 V3.11.0 Fig. 13, TS25.212 V3.11.0 Fig. 14, TS25.212 V3.11.0 S4.4, TS25.212 V3.11.0 S4.4.2, TS25.212 V3.11.0 S4.4.3, TS25.212 V3.11.0 S4.4.4, TS25.214 V3.11.0 S5, TS25.214 V3.11.0 S5.1, TS25.214 V3.11.0 S5.1.2, TS25.214 V3.11.0 S5.1.2.2, TS25.214 V3.11.0 S5.1.2.2.1, TS25.214 V3.11.0 S7.2 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|---|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 120 | | | | | | | |
| BS, CN, RNC, T | NEC | EP 0876005 | DE, FR, GB | 27/02/2012 | Cellular mobile communications system using frequencies commonly shared by neighboring cells for handoff operations | 1 | TS25.104 V3.13.0 S5.4.3, TS25.133 V3.21.0 S5.1.1, TS25.133 V3.21.0 S8.1.1, TS25.133 V3.21.0 S8.1.2, TS25.214 V3.12.0 S4.3.2.1, TS25.301 V3.11.0 S5.6, TS25.301 V3.11.0 S5.6.1, TS25.331 V3.21.0 S10.2.1, TS25.331 V3.21.0 S10.2.33, TS25.331 V3.21.0 S10.3.6.33, TS25.331 V3.21.0 S14.1.1, TS25.331 V3.21.0 S14.1.2, TS25.331 V3.21.0 S14.1.2.5, TS25.331 V3.21.0 S14.1.2.6, TS25.331 V3.21.0 S8.2.2, TS25.331 V3.21.0 S8.3.4, TS25.401 V3.9.0 S7.2.4.3 |
| 121 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | US 6341224 | | 26/06/2017 | Power controller for mobile communication system wherein a signal to interference threshold is dynamically moved based on an error rate measurement | 1, 4 | TS25.211 V3.12.0 S5, TS25.211 V3.12.0 S5.2, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3, TS25.211 V3.12.0 S5.3.2, TS25.211 V3.12.0 S5.3.2.3, TS25.214 V3.12.0 S3, TS25.214 V3.12.0 S5, TS25.214 V3.12.0 S5.1, TS25.214 V3.12.0 S5.1.2, TS25.214 V3.12.0 S5.1.2.2, TS25.214 V3.12.0 S5.1.2.2.1, TS25.214 V3.12.0 S5.2, TS25.214 V3.12.0 S5.2.1, TS25.214 V3.12.0 S5.2.1.2, TS25.214 V3.12.0 S5.2.1.2.1 Annex B2, TS25.214 V3.12.0 S5.2.3, TS25.214 V3.12.0 S5.2.3.1, TS25.214 V3.12.0 S5.2.3.2, TS25.215 V3.13.0 S5, TS25.215 V3.13.0 S5.1, TS25.215 V3.13.0 S5.1.6, TS25.215 V3.13.0 S5.2, TS25.215 V3.13.0 S5.2.2, TS25.215 V3.13.0 S5.2.7, TS25.301 V3.11.0 S5, TS25.301 V3.11.0 S5.4, TS25.301 V3.11.0 S5.4.2, TS25.302 V3.16.0 S7, TS25.302 V3.16.0 S7.1, TS25.302 V3.16.0 S7.1.5, TS25.331 V3.21.0 S10, TS25.331 V3.21.0 S10.3, TS25.331 V3.21.0 S10.3.3, TS25.331 V3.21.0 S10.3.3.7, TS25.331 V3.21.0 S14, TS25.331 V3.21.0 S14.9, TS25.331 V3.21.0 S14.9.1, TS25.427 V3.11.0 S5, TS25.427 V3.11.0 S5.4, TS25.427 V3.11.0 S6, TS25.427 V3.11.0 S6.2, TS25.427 V3.11.0 S6.2.1, TS25.427 V3.11.0 S6.2.2, TS25.427 V3.11.0 S6.2.4, TS25.427 V3.11.0 S6.2.4.5, TS25.427 V3.11.0 S6.2.4.7 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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|---|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 122 | | | | | | | |
| BS, T | Mitsubishi | JP 3749249 | | 10/05/2022 | Communication system, base station and mobile station | 7, 8 | TS25.211 V5.7.0 Fig 2A, TS25.211 V5.7.0 S5, TS25.211 V5.7.0 S5.2.1, TS25.211 V5.7.0 S7.7, TS25.214 V5.11.0 S6, TS25.214 V5.11.0 S6A.1, TS25.214 V5.11.0 S6A.1.2, TS25.308 V5.7.0 S4, TS25.308 V5.7.0 S7, TS25.308 V5.7.0 S7.1.1, TS25.308 V5.7.0 S8, TS25.308 V5.7.0 S8.2, TS25.308 V5.7.0 S8.2.1, TS25.331 V5.13.0 S10, TS25.331 V5.13.0 S10.3.6.40a |
| BS, T | Mitsubishi | US 7130588 | | 10/05/2022 | Communication system, base station and mobile station | 2, 4 | TS25.211 V5.7.0 Fig 2A, TS25.211 V5.7.0 S5.2.1, TS25.214 V5.11.0 S6A.1, TS25.214 V5.11.0 S6A.1.2, TS25.308 V5.7.0 S4, TS25.308 V5.7.0 S7.1.1, TS25.308 V5.7.0 S8.2.1, TS25.331 V5.13.0 S10.3.6.40a |
| T | Mitsubishi | CN 100382462C | | 10/05/2022 | Communications System, Mobile Station And Base Station | 1 | TS25.211 V5.7.0 Fig 2A, TS25.211 V5.7.0 S5.2.1, TS25.214 V5.11.0 S6A.1, TS25.214 V5.11.0 S6A.1.2, TS25.308 V5.7.0 S8.2.1, TS25.308 V5.7.0 S8.2.2, TS25.331 V5.13.0 S10.3.6.40a |
| 123 | | | | | | | |
| BS | Fujitsu | JP 3563219 | | 20/12/2016 | Mobile communication system, radio base station and exchanger | 2 | TR25.990 V3.0.0 S3, TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 S5.3.2, TS25.305 V3.11.0 S5, TS25.305 V3.11.0 S5.1, TS25.427 V3.11.0 Fig 2, TS25.427 V3.11.0 S5.1.2, TS25.430 V3.8.0 Fig 7, TS25.430 V3.8.0 S7 |
| 124 | | | | | | | |
| T | Fujitsu | JP 3595173 | | 06/10/2018 | Method for controlling of transmitting power of a radio equipment | 1 | TS25.211 V3.11.0 Figure 1, TS25.211 V3.11.0 S5.2.1, TS25.211 V3.11.0 Table 3, TS25.211 V3.11.0 Table 4, TS25.211 V3.11.0 Table 5, TS25.212 V3.9.0 Fig. 1, TS25.212 V3.9.0 S4.1, TS25.212 V3.9.0 S4.2, TS25.212 V3.9.0 S4.2.1, TS25.212 V3.9.0 S4.2.3, TS25.212 V3.9.0 Table 1, TS25.214 V3.12.0 S4.1.2.5.2, TS25.214 V3.12.0 S5.1.2.5, TS25.214 V3.12.0 S5.1.2.5.1 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 125 | | | | | | | |
| T | Sharp | EP 1172943 | DE, ES, FR, GB, IT | 31/08/2012 | Method for improving mobile radiocommunication system performances using a power control algorithm * Expiry date of right to license: 31 August 2012 | 1, 6 | TS25.212 V6.6.0 S4.4, TS25.212 V6.6.0 S4.4.3.2, TS25.214 V6.7.0 S5.2.1.3, TS25.331 V6.6.0 S10.3.6.33, TS25.331 V6.6.0 S14.9, TS25.331 V6.6.0 S14.9.1, TS25.331 V6.6.0 S14.9.2, TS25.401 V6.7.0 S7.2.4.8, TS25.401 V6.7.0 S7.2.4.8.2, TS25.401 V6.7.0 S7.2.4.8.4 |
| T | Sharp | JP 3895752 | | 31/08/2012 | Method for improving performances of a mobile radio communication system using a power control algorithm * Expiry date of right to license: 31 August 2012 | 1 | TS25.212 V6.6.0 S4.4.3.2, TS25.214 V6.7.0 S5.2.1.3, TS25.331 V6.6.0 S10.3.6.33, TS25.331 V6.6.0 S14.9.1, TS25.331 V6.6.0 S14.9.2, TS25.331 V6.6.0 S8.1.1.1, TS25.401 V6.7.0 S7.2.4.8, TS25.401 V6.7.0 S7.2.4.8.2, TS25.401 V6.7.0 S7.2.4.8.4 |
| 126 | | | | | | | |
| BS, CN, RNC, T | Mitsubishi | JP 3746067 | | 06/12/2018 | Method and apparatus for speech decoding | 1, 2 | TS26.190 V6.0.0 S4.4, TS26.190 V6.0.0 S6, TS26.190 V6.0.0 S6.1 |
| 127 | | | | | | | |
| BS, CN, RNC, T | Mitsubishi | JP 3748083 | | 27/10/2014 | Wideband Speech Reconstruction Method and Wideband Speech Reconstruction Apparatus | 1, 2 | TS26.190 V6.0.0 S4.4, TS26.190 V6.0.0 S6.3.1, TS26.190 V6.0.0 S6.3.3 |
| 128 | | | | | | | |
| BS, CN, RNC, T | Mitsubishi | JP 3736801 | | 06/12/2018 | Method and apparatus for speech decoding | 1, 3 | TS26.190 V6.0.0 S4.4, TS26.190 V6.0.0 S6.1, TS26.190 V6.0.0 S8 Fig. 3 |
| BS, CN, RNC, T | Mitsubishi | EP 1426925 | DE, FR, GB, IT, SE | 06/12/2018 | Method and apparatus for speech decoding | 1 | TS26.190 V6.0.0 Fig. 3, TS26.190 V6.0.0 S4.3, TS26.190 V6.0.0 S4.4, TS26.190 V6.0.0 S5.8.1, TS26.190 V6.0.0 S6, TS26.190 V6.0.0 S6.1 |
| BS, CN, RNC, T | Mitsubishi | US 7092885 | | 06/12/2018 | Method and apparatus for speech decoding | 1, 2 | TS26.190 V6.6.0 Fig. 3, TS26.190 V6.6.0 S4.3, TS26.190 V6.6.0 S4.4, TS26.190 V6.6.0 S5.9, TS26.190 V6.6.0 S6.1 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|--|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 129 | | | | | | | |
| BS, CN, RNC, T | Mitsubishi | EP 1420534 | DE, FR, GB | 10/03/2019 | A method and apparatus for assigning codes *With effect 1 July 2010 the effective ownership of this patent has been transferred to Sony Corporation: the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license | 1 | TS25.331 V6.6.0 S10.2.27, TS25.331 V6.6.0 S10.3.3.1, TS25.331 V6.6.0 S10.3.6.21, TS25.331 V6.6.0 S10.3.6.27, TS25.331 V6.6.0 S8.2.2, TS25.331 V6.6.0 S8.2.2.3, TS25.331 V6.6.0 S8.6.3.1, TS25.401 V1.1.1 S7.2.4.5, TS25.401 V3.1.0 S6, TS25.401 V3.1.0 S6.1.3, TS25.401 V3.1.0 S6.1.7, TS25.402 V3.1.0 S5, TS25.402 V3.1.0 S9.4, TS25.433 V3.1.0 S8.3.2.1, TS25.433 V6.5.0 Figure 32, TS25.433 V6.5.0 S8.3.3.1, TS25.433 V6.5.0 S8.3.3.2, TS25.433 V6.5.0 S9.1.42.1, TS25.433 V6.5.0 S9.1.45, TS25.433 V6.5.0 S9.2.2.14, TS25.433 V6.5.0 S9.2.2.14A |
| BS, RNC, T | Mitsubishi | US 7133389 | | 18/09/2018 | Method and apparatus for assigning codes *With effect from 1 July 2010, the effective ownership of this patent has been transferred to Sony Corporation: the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license. | 1, 2 | TS25.331 V3.21.0 Fig. 8.2.2-3, TS25.331 V3.21.0 S10.2.27, TS25.331 V3.21.0 S10.3.3.1, TS25.331 V3.21.0 S10.3.6.21, TS25.331 V3.21.0 S10.3.6.27, TS25.331 V3.21.0 S8.2.2, TS25.331 V3.21.0 S8.2.2.3, TS25.331 V3.21.0 S8.6.3.1, TS25.401 V1.1.1 S6, TS25.401 V1.1.1 S6.1, TS25.401 V1.1.1 S6.1.1, TS25.401 V1.1.1 S7.2.4.5, TS25.402 V3.10.0 S5, TS25.402 V3.10.0 S9.4, TS25.433 V3.14.2 S8.3.2.1, TS25.433 V3.14.2 S8.3.3, TS25.433 V3.14.2 S8.3.3.1, TS25.433 V3.14.2 S9.1.42.1, TS25.433 V3.14.2 S9.1.45, TS25.433 V3.14.2 S9.2.2.14, TS25.433 V3.14.2 S9.2.2.14A, TS25.433 V6.5.0 Figure 32, TS25.433 V6.5.0 S8.3.3.2 |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|---|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 130 | | | | | | | |
| BS, CN, RNC, T | Mitsubishi | EP 1420535 | DE, FR, GB | 10/03/2019 | Mobile station and corresponding method for code switching in a CDMA system *With effect from 1 July 2010, the effective ownership of this patent has been transferred to Sony Corporation: the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license. | 1 | TS25.331 V3.1.0 S10.1.22, TS25.331 V6.6.0 S10.2.27, TS25.331 V6.6.0 S10.3.3.1, TS25.331 V6.6.0 S10.3.6.21, TS25.331 V6.6.0 S10.3.6.27, TS25.331 V6.6.0 S8.2.2, TS25.331 V6.6.0 S8.2.2.3, TS25.331 V6.6.0 S8.3.2.1, TS25.331 V6.6.0 S8.3.3, TS25.331 V6.6.0 S8.6.3.1, TS25.331 V6.6.0 S9.1.42.1, TS25.331 V6.6.0 S9.1.45, TS25.331 V6.6.0 S9.2.2.14A, TS25.401 V3.1.0 S6, TS25.401 V3.1.0 S6.1.7, TS25.401 V3.1.0 S7.2.4.5, TS25.402 V3.1.0 S5, TS25.402 V3.1.0 S9.4 |
| T | Mitsubishi | US 7120137 | | 18/09/2018 | Method and apparatus for assigning codes *With effect from 1 July 2010, the effective ownership of this patent has been transferred to Sony Corporation: the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license. | 1, 2 | TS25.331 V3.21.0 Fig. 8.2.2-3, TS25.331 V3.21.0 S10.2.27, TS25.331 V3.21.0 S10.3.3.1, TS25.331 V3.21.0 S10.3.6.21, TS25.331 V3.21.0 S10.3.6.27, TS25.331 V3.21.0 S8.2.2, TS25.331 V3.21.0 S8.2.2.3, TS25.331 V3.21.0 S8.6.3.1, TS25.401 V1.1.1 S6, TS25.401 V1.1.1 S6.1, TS25.401 V1.1.1 S6.1.1, TS25.401 V1.1.1 S7.2.4.5, TS25.402 V3.10.0 S5, TS25.402 V3.10.0 S9.4, TS25.433 V3.14.2 S8.3.2.1, TS25.433 V3.14.2 S9.1.42.1, TS25.433 V3.14.2 S9.1.45, TS25.433 V3.14.2 S9.2.2.14, TS25.433 V3.14.2 S9.2.2.14A, TS25.433 V6.5.0 Figure 32, TS25.433 V6.5.0 S8.3.3.1, TS25.433 V6.5.0 S8.3.3.2 |
| 131 | | | | | | | |
| BS, CN, RNC, T | Mitsubishi | JP 3748081 | | 27/10/2014 | Wideband Speech Reconstruction Method and Wideband Speech Reconstruction Apparatus | 1, 2 | TS26.190 V6.0.0 Fig. 3, TS26.190 V6.0.0 S4, TS26.190 V6.0.0 S4.4, TS26.190 V6.0.0 S6.1, TS26.190 V6.0.0 S6.3.1, TS26.190 V6.0.0 S6.3.2.2, TS26.190 V6.0.0 S6.3.3 |
| 132 | | | | | | | |
| BS, CN, RNC, T | Mitsubishi | JP 3748082 | | 27/10/2014 | Wideband Speech Reconstruction Method and Wideband Speech Reconstruction Apparatus | 1, 2 | TS26.190 V6.0.0 Fig. 3, TS26.190 V6.0.0 S4, TS26.190 V6.0.0 S4.4, TS26.190 V6.0.0 S6.1, TS26.190 V6.0.0 S6.3.1, TS26.190 V6.0.0 S6.3.2.2, TS26.190 V6.0.0 S6.3.3 |
| 133 | | | | | | | |
| BS, CN, RNC, T | NTT | JP 2613503 | | 08/07/2011 | Speech excitation signal encoding and decoding methods | 1 | TS26.090 V6.0.0 S3.1, TS26.090 V6.0.0 S4.3, TS26.090 V6.0.0 S5.6.1, TS26.090 V6.0.0 S5.7.2 |
| BS, CN, RNC, T | NTT | US 5396576 | | 20/05/2012 | Speech coding and decoding methods using adaptive and random code books | 24 | TS26.090 V6.0.0 S3.1, TS26.090 V6.0.0 S3.2, TS26.090 V6.0.0 S5.6.1, TS26.090 V6.0.0 S6.1 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|--|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 134 | | | | | | | |
| BS, CN, RNC, T | NTT | JP 2853824 | | 02/10/2012 | Parameter Information Coding method of Speech | 1 | TS26.090 V3.1.0 S4.3, TS26.090 V3.1.0 S5.2, TS26.090 V3.1.0 S5.2.5, TS26.090 V3.1.0 S6.1 |
| 135 | | | | | | | |
| BS, CN, RNC, T | NTT | JP 3085347 | | 07/10/2014 | A speech decoding method and apparatus | 2 | TS26.090 V6.0.0 S4, TS26.090 V6.0.0 S4.3, TS26.090 V6.0.0 S4.4, TS26.090 V6.0.0 S5, TS26.090 V6.0.0 S5.2, TS26.090 V6.0.0 S5.2.5, TS26.090 V6.0.0 S5.2.6, TS26.090 V6.0.0 S6, TS26.090 V6.0.0 S6.1, TS26.091 V6.0.0 S5, TS26.091 V6.0.0 S5.1, TS26.091 V6.0.0 S6, TS26.091 V6.0.0 S6.2.1, TS26.091 V6.0.0 S6.2.2, TS26.091 V6.0.0 S6.2.3 |
| 136 | | | | | | | |
| BS, CN, RNC, T | NTT | JP 3275247 | | 22/05/2011 | Speech coding and decoding methods | 5 | TS26.090 V6.0.0 S3, TS26.090 V6.0.0 S3.1, TS26.090 V6.0.0 S3.2, TS26.090 V6.0.0 S6, TS26.090 V6.0.0 S6.1 |
| 137 | | | | | | | |
| CN | NTT DoCoMo | EP 0750437 | DE, FR, GB, IT, SE | 28/12/2015 | MOBILE TERMINAL LOCATION REGISTRATION IN A MOBILE COMMUNICATION SYSTEM | 1, 8 | TS23.060 V3.16.0 S13.1, TS23.060 V3.16.0 S13.3, TS23.060 V3.16.0 S14.1, TS23.060 V3.16.0 S4, TS23.060 V3.16.0 S5.3.2.2, TS23.060 V3.16.0 S5.3.2.5, TS23.060 V3.16.0 S5.3.3.2, TS23.060 V3.16.0 S5.4, TS23.060 V3.16.0 S5.4.1, TS23.060 V3.16.0 S6.9.2.1, TS23.060 V3.16.0 S9.2.2.2, TS23.060 V3.16.0 S9.2.2.2.1, TS25.201 V3.4.0 S4.1.1 |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

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|---|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 138 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | EP 1011211 | DE, FR, GB, IT, SE | 17/04/2018 | Receiver and method for coherent reception using received pilot symbols | 4, 6 | TS25.211 V3.12.0 Fig. 1, TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 S1, TS25.211 V3.12.0 S3.1, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3.2, TS25.211 V3.12.0 S5.3.3.2, TS25.214 V3.12.0 S4.3.2.1, TS25.214 V3.12.0 S4.3.2.3 |
| BS, T | NTT DoCoMo | CN 98805159 | | 17/04/2018 | Base station apparatus of mobile communication system | 5, 6 | TS25.211 V3.12.0 Fig. 1, TS25.211 V3.12.0 Fig. 13, TS25.211 V3.12.0 Fig. 15, TS25.211 V3.12.0 Figure 12, TS25.211 V3.12.0 Figure 17, TS25.211 V3.12.0 Figure 7, TS25.211 V3.12.0 Figure 9, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.2.2.1.3, TS25.211 V3.12.0 S5.3.2, TS25.211 V3.12.0 S5.3.2.3, TS25.211 V3.12.0 Table 11, TS25.211 V3.12.0 Table 16, TS25.211 V3.12.0 Table 18 |
| BS, RNC, T | NTT DoCoMo | CA 2484367 | | 17/04/2018 | Base station apparatus of mobile communication system. | 3, 5 | TS25.211 V3.12.0 Fig. 1, TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 S1, TS25.211 V3.12.0 S3.2, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3.2, TS25.211 V3.12.0 S5.3.3.2, TS25.211 V3.12.0 Table 12, TS25.211 V3.12.0 Table 17, TS25.211 V3.12.0 Table 3, TS25.211 V3.12.0 Table 4, TS25.214 V3.12.0 S4.3.2.1, TS25.214 V3.12.0 S4.3.2.3 |
| 139 | | | | | | | |
| BS, RNC | NTT DoCoMo | EP 1357689 | DE, FR, GB, IT, SE | 23/02/2016 | Variable rate transmission method and transmitter using the same | 1, 4 | TS25.211 V3.12.0 Figure 10, TS25.211 V3.12.0 S5.3.2, TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.1.1, TS25.212 V3.11.0 S4.2.10, TS25.212 V3.11.0 S4.2.2, TS25.212 V3.11.0 S4.2.2.1, TS25.213 V3.9.0 Figure 8, TS25.213 V3.9.0 S5.1 |
| 140 | | | | | | | |
| T | NTT DoCoMo | JP 3704127 | | 16/01/2017 | Radio Transmitting Apparatus, Radio Receiving Apparatus and Radio Transmitting Method | 1, 2, 3, 4, 5, 6, 7, 8 | TS25.201 V3.4.0 S4.2.1, TS25.211 V3.12.0 Fig. 1, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 Table 1, TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.6.1, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.7.1.1, TS25.213 V3.9.0 Figure 1, TS25.213 V3.9.0 S4.2.1, TS25.214 V3.12.0 S5.1.2.5.3, TS25.301 V3.11.0 S5.3.1.1.1, TS25.301 V3.11.0 S5.3.1.1.2.1 |
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|---|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 141 | | | | | | | |
| T | Mitsubishi | KR 561115 | | 21/08/2022 | Transmission of Additional Dedicated Physical Control Channel (ADPCCH) in W-CDMA system | 1, 11 | TS25.213 V5.5.0 Figure 1, TS25.213 V5.5.0 Figure 7, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.213 V5.5.0 S4.4.2 |
| T | Mitsubishi | EP 1471658 | DE, FR, GB | 21/08/2022 | Transmission of additional dedicated physical control channel in W-CDMA system | 1 | TS25.213 V5.5.0 Figure 1, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1 |
| T | Mitsubishi | US 7307943B2 | | 21/08/2022 | Mobile Station, Base Station, Communication System, and Communication Method | 2 | TS25.211 V5.5.0 S3.2, TS25.211 V5.5.0 S5.2.1, TS25.213 V5.5.0 Fig. 1, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.308 V5.4.0 S3.2, TS25.308 V5.4.0 S4 |
| T | Mitsubishi | CN 446446 | | 21/08/2022 | IQ multiplexing device and IQ multiplexing method | 1 | TS25.201 V5.2.0 Fig 2, TS25.201 V5.2.0 S4.2.6, TS25.211 V5.5.0 Fig 27, TS25.211 V5.5.0 S3.2, TS25.211 V5.5.0 S4.1.1.1, TS25.211 V5.5.0 S5.2.1, TS25.211 V5.5.0 S6.1, TS25.212 V5.7.0 Fig 1, TS25.212 V5.7.0 S4.1, TS25.212 V5.7.0 S4.2, TS25.212 V5.7.0 S4.2.10, TS25.212 V5.7.0 S4.2.12, TS25.212 V5.7.0 S4.2.7.1.1, TS25.213 V5.5.0 Fig. 1, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.308 V5.4.0 S3.2, TS25.308 V5.4.0 S4 |
| T | Mitsubishi | HK 1076210 | | 21/08/2022 | IQ multiplexing device and IQ multiplexing method | 1 | TS25.201 V5.2.0 Fig 2, TS25.201 V5.2.0 S4.2.6, TS25.211 V5.5.0 Figure 27, TS25.211 V5.5.0 S3.2, TS25.211 V5.5.0 S4.1.1.1, TS25.211 V5.5.0 S5.2.1, TS25.211 V5.5.0 S6.1, TS25.212 V5.7.0 Fig 1, TS25.212 V5.7.0 S4.1, TS25.212 V5.7.0 S4.2, TS25.212 V5.7.0 S4.2.10, TS25.212 V5.7.0 S4.2.12, TS25.212 V5.7.0 S4.2.7.1.1, TS25.213 V5.5.0 Fig. 1, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.308 V5.4.0 S3.2, TS25.308 V5.4.0 S4 |
| 142 | | | | | | | |
| T | Mitsubishi | JP 3769007 | | 10/05/2022 | Communication system, base station and mobile station | 2, 3 | TR21.905 V5.10.0 S3, TS25.211 V5.7.0 Fig 2A, TS25.211 V5.7.0 S5.2.1, TS25.213 V5.6.0 S4.2.1 Figure 1, TS25.214 V5.11.0 S6A.1, TS25.214 V5.11.0 S6A.1.1, TS25.214 V5.11.0 S6A.1.2, TS25.308 V5.7.0 S3.2, TS25.308 V5.7.0 S4, TS25.331 V5.13.0 S10.3.6.23a, TS25.331 V5.13.0 S10.3.6.40a, TS25.401 V5.9.0 S3.1, TS25.401 V5.9.0 S3.2, TS25.401 V5.9.0 S5.1 Figure 1, TS25.401 V5.9.0 S6 Figure 4 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 143 | | | | | | | |
| BS, T | Mitsubishi | JP 3768506 | | 21/04/2020 | Apparatus and method for a telecommunication system | 1, 4 | TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 S4.1, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.8, TS25.331 V3.18.0 Figure 8.2.2-3, TS25.331 V3.18.0 S10.2.2.7, TS25.331 V3.18.0 S10.3.5.11, TS25.331 V3.18.0 S10.3.5.2, TS25.331 V3.18.0 S10.3.5.23, TS25.331 V3.18.0 S8.2.1, TS25.331 V3.18.0 S8.2.2 |
| BS, T | Mitsubishi | US 7133388 | | 20/04/2020 | Method for balancing the ratio EB/I in a service multiplexing CDMA system and telecommunication systems using same | 1, 5, 10, 11 | TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 S3.2, TS25.212 V3.11.0 S4.1, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.7.1.1, TS25.212 V3.11.0 S4.2.8, TS25.331 V3.21.0 Fig. 8.2.2-3, TS25.331 V3.21.0 S10.2.2.7, TS25.331 V3.21.0 S10.3.5.11, TS25.331 V3.21.0 S10.3.5.2, TS25.331 V3.21.0 S10.3.5.23, TS25.331 V3.21.0 S10.3.6.88, TS25.331 V3.21.0 S3.2, TS25.331 V3.21.0 S8.2.2 |
| BS, T | Mitsubishi | EP 1494384 | DE, FR, GB | 20/04/2020 | Method for alancing the ratio Eb/I in a service multiplexing CDMA system and telecommunication system using this method | 1, 5 | TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 S3.2, TS25.212 V3.11.0 S4.1, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.7.1.1, TS25.212 V3.11.0 S4.2.8, TS25.331 V3.18.0 Figure 8.2.2-3, TS25.331 V3.18.0 S10.2.2.7, TS25.331 V3.18.0 S10.3.5.11, TS25.331 V3.18.0 S10.3.5.2, TS25.331 V3.18.0 S10.3.5.23, TS25.331 V3.18.0 S8.2.1, TS25.331 V3.18.0 S8.2.2 |
| 144 | | | | | | | |
| BS, T | Mitsubishi | JP 3768522 | | 21/04/2020 | Apparatus and method for a telecommunication system | 1, 5 | TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 S4.1, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.8, TS25.331 V3.21.0 Fig. 8.2.2-3, TS25.331 V3.21.0 S10.3.5.11, TS25.331 V3.21.0 S8.2.2 |
| 145 | | | | | | | |
| BS, T | Mitsubishi | JP 3774470 | | 21/04/2020 | Apparatus and method for a telecommunication system | 1, 3 | TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 S4.1, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.8 |
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|---|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 146 | | | | | | | |
| T | Mitsubishi | JP 3771249 | | 10/12/2017 | Transmission power and data rate based communication control method for a mobile communication system | 1 | TR21.905 V3.3.0 S3, TS25.321 V3.17.0 Figure 11.4.1, TS25.321 V3.17.0 S11.4 |
| T | Mitsubishi | EP 1641141 | DE, FR, GB | 10/12/2017 | Transmission power and data rate based communication control method for a mobile communication system | 1 | TR21.905 V3.3.0 S3, TS25.321 V3.17.0 Figure 11.4.1, TS25.321 V3.17.0 S11.4 |
| 147 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | JP 3872525 | | 03/06/2018 | Mobile Radio Communication System, mobile station and method for controlling diversity handover branch | 1, 8, 14 | TS25.133 V3.22.0 S5.1.1, TS25.133 V3.22.0 S8.1.2.2, TS25.133 V3.22.0 S8.1.2.2.1, TS25.211 V3.12.0 S5.3.3.1.1, TS25.215 V3.13.0 S5.1.1, TS25.215 V3.13.0 S5.1.5, TS25.331 V3.21.0 S10.2.17, TS25.331 V3.21.0 S10.2.19, TS25.331 V3.21.0 S10.2.48.8.14, TS25.331 V3.21.0 S10.2.48.8.15, TS25.331 V3.21.0 S10.3.7.33, TS25.331 V3.21.0 S10.3.7.35, TS25.331 V3.21.0 S10.3.7.36, TS25.331 V3.21.0 S10.3.7.40, TS25.331 V3.21.0 S10.3.7.44, TS25.331 V3.21.0 S10.3.7.47, TS25.331 V3.21.0 S13.4.0, TS25.331 V3.21.0 S8.1.1.1.2, TS25.331 V3.21.0 S8.3.4.1, TS25.331 V3.21.0 S8.3.4.2, TS25.331 V3.21.0 S8.4.0, TS25.401 V3.10.0 S3.1, TS25.401 V3.10.0 S6, TS25.430 V3.8.0 S5.2.6.2 |
| 148 | | | | | | | |
| T | Mitsubishi | EP 1471657B1 | DE, FR, GB | 21/08/2022 | Transmission of Additional Dedicated Physical Control CHannel (ADPCCH) in W-CDMA system | 1 | TS25.211 V5.5.0 S5.2.1, TS25.213 V5.5.0 Figure 7, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.213 V5.5.0 S4.4.2 Fig. 7, TS25.308 V5.4.0 Fig. 5.2.3-1, TS25.308 V5.4.0 S3.2, TS25.308 V5.4.0 S4, TS25.308 V5.4.0 S5.2.3 |
| T | Mitsubishi | US 7145863B2 | | 21/08/2022 | Mobile station, base station, communication system and communication method | 1 | TS25.211 V5.5.0 Fig. 2A, TS25.211 V5.5.0 S3.2, TS25.211 V5.5.0 S5.2.1, TS25.213 V5.5.0 Figure 1, TS25.213 V5.5.0 Figure 7, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.213 V5.5.0 S4.4.1, TS25.213 V5.5.0 S4.4.2, TS25.308 V5.4.0 S3.2, TS25.308 V5.4.0 S4 |
| T | Mitsubishi | KR 803240 | | 21/08/2022 | Mobile Station, Communication System, and Communication Method | 1, 11 | TS25.212 V5.8.0 S4.2.7, TS25.212 V5.8.0 S4.2.7.1.1, TS25.213 V5.5.0 Fig. 1, TS25.213 V5.5.0 Fig. 7, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.213 V5.5.0 S4.4.2, TS25.321 V5.8.0 S11.4, TS25.331 V5.8.0 S8.2.2.2 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|--|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 149 | | | | | | | |
| T | Mitsubishi | EP 1404031B1 | DE, FR, GB | 21/08/2022 | Transmission of Additional Dedicated Physical Control Channel (ADPCCH) in W-CDMA system | 1 | TS25.211 V5.5.0 S3.2, TS25.211 V5.5.0 S5.2.1, TS25.212 V5.8.0 S4.2.7, TS25.212 V5.8.0 S4.2.7.1.1, TS25.213 V5.5.0 Figure 1, TS25.213 V5.5.0 Figure 7, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.213 V5.5.0 S4.4.1, TS25.213 V5.5.0 S4.4.2, TS25.308 V5.4.0 S3.2, TS25.308 V5.4.0 S4, TS25.321 V5.8.0 S11.4, TS25.331 V5.8.0 S8.2.2 |
| T | Mitsubishi | KR 803239 | | 21/08/2022 | Mobile Station, Base Station, Communication System and Communication Method | 1, 11 | TS25.212 V5.8.0 S4.2.7, TS25.212 V5.8.0 S4.2.7.1.1, TS25.213 V5.5.0 Fig. 1, TS25.213 V5.5.0 Fig. 7, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.213 V5.5.0 S4.4.1, TS25.213 V5.5.0 S4.4.2, TS25.321 V5.8.0 S11.4, TS25.331 V5.8.0 S8.2.2.2 |
| T | Mitsubishi | CN 471095 | | 21/08/2022 | IQ multiplexing device and IQ multiplexing method | 1 | TS25.201 V5.2.0 Fig 2, TS25.201 V5.2.0 S4.2.6, TS25.211 V5.5.0 Fig 27, TS25.211 V5.5.0 S3.2, TS25.211 V5.5.0 S4.1.1.1, TS25.211 V5.5.0 S5.2.1, TS25.211 V5.5.0 S6.1, TS25.212 V5.7.0 Fig 1, TS25.212 V5.7.0 S4.1, TS25.212 V5.7.0 S4.2, TS25.212 V5.7.0 S4.2.10, TS25.212 V5.7.0 S4.2.12, TS25.212 V5.7.0 S4.2.7.1.1, TS25.213 V5.5.0 Fig. 1, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.308 V5.4.0 S4 |
| T | Mitsubishi | MX 246511 | | 21/08/2022 | Mobile station, Base station, Communication system and Communication method | 1 | TS25.211 V5.5.0 S3.2, TS25.211 V5.5.0 S5.2.1, TS25.211 V5.5.0 S5.2.1.1, TS25.211 V5.5.0 S5.2.1.2, TS25.213 V5.5.0 Fig. 1, TS25.213 V5.5.0 Fig. 7, TS25.213 V5.5.0 Figure 1A, TS25.213 V5.5.0 Figure 1B, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.213 V5.5.0 S4.2.1.1, TS25.213 V5.5.0 S4.2.1.2, TS25.213 V5.5.0 S4.4.1, TS25.213 V5.5.0 S4.4.2, TS25.308 V5.4.0 S3.2, TS25.308 V5.4.0 S4 |
| T | Mitsubishi | HK 1076209 | | 21/08/2022 | IQ multiplexing device and IQ multiplexing method | 1 | TS25.201 V5.2.0 Fig 2, TS25.201 V5.2.0 S4.2.6, TS25.211 V5.5.0 Figure 27, TS25.211 V5.5.0 S3.2, TS25.211 V5.5.0 S4.1, TS25.211 V5.5.0 S4.1.1, TS25.211 V5.5.0 S4.1.1.1, TS25.211 V5.5.0 S5.2.1, TS25.211 V5.5.0 S6.1, TS25.212 V5.7.0 Fig 1, TS25.212 V5.7.0 S4.1, TS25.212 V5.7.0 S4.2, TS25.212 V5.7.0 S4.2.10, TS25.212 V5.7.0 S4.2.12, TS25.212 V5.7.0 S4.2.7.1.1, TS25.213 V5.5.0 Fig. 1, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.308 V5.4.0 S3.2, TS25.308 V5.4.0 S4 |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

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|---|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 150 | | | | | | | |
| T | Mitsubishi | JP 3776431 | | 31/01/2023 | INFORMATION TRANSMITTING METHOD, MOBILE COMMUNICATION SYSTEM, BASE STATION AND MOBILE STATION | 1, 4 | TS25.212 V5.3.0 S2, TS25.212 V5.3.0 S3.3, TS25.212 V5.3.0 S4.6, TS25.212 V5.3.0 S4.6.2.2, TS25.212 V5.3.0 S4.6.2.3, TS25.213 V5.5.0 S5.2.1, TS25.308 V5.3.0 S5.2.1, TS25.308 V5.3.0 S5.2.2.1, TS25.308 V5.3.0 S5.3, TS25.321 V5.7.0 Annex A (normative), TS25.321 V5.7.0 S9.2.3.1, TS25.321 V5.7.0 Table 9.2.3.1 |
| T | Mitsubishi | KR 10-0677002 | | 31/01/2023 | Information notification method, and mobile station | 13, 22 | TS25.212 V5.3.0 S2, TS25.212 V5.3.0 S3.3, TS25.212 V5.3.0 S4.6, TS25.212 V5.3.0 S4.6.2.2, TS25.212 V5.3.0 S4.6.2.3, TS25.213 V5.5.0 S5.2.1, TS25.308 V5.3.0 S5.2.1, TS25.308 V5.3.0 S5.2.2.1, TS25.308 V5.3.0 S5.3, TS25.321 V5.7.0 Annex A (normative), TS25.321 V5.7.0 S9.2.3.1, TS25.321 V5.7.0 Table 9.2.3.1 |
| 151 | | | | | | | |
| T | Mitsubishi | JP 3776435 | | 31/01/2023 | INFORMATION TRANSMITTING METHOD, MOBILE COMMUNICATION SYSTEM, BASE STATION AND MOBILE STATION | 1, 5 | TS25.212 V5.3.0 S2, TS25.212 V5.3.0 S3.3, TS25.212 V5.3.0 S4.6, TS25.212 V5.3.0 S4.6.2.2, TS25.212 V5.3.0 S4.6.2.3, TS25.213 V5.5.0 S5.2.1, TS25.308 V5.3.0 S5.2.1, TS25.308 V5.3.0 S5.2.2.1, TS25.308 V5.3.0 S5.3, TS25.321 V5.7.0 Annex A (normative), TS25.321 V5.7.0 S9.2.3.1, TS25.321 V5.7.0 Table 9.2.3.1 |
| T | Mitsubishi | KR 10-0677003 | | 31/01/2023 | Information notification method, and mobile station | 1, 7 | TS25.212 V5.3.0 S2, TS25.212 V5.3.0 S3.3, TS25.212 V5.3.0 S4.6, TS25.212 V5.3.0 S4.6.2.2, TS25.212 V5.3.0 S4.6.2.3, TS25.213 V5.5.0 S5.2.1, TS25.308 V5.3.0 S5.2.1, TS25.308 V5.3.0 S5.2.2.1, TS25.308 V5.3.0 S5.3, TS25.321 V5.7.0 Annex A (normative), TS25.321 V5.7.0 S9.2.3.1, TS25.321 V5.7.0 Table 9.2.3.1 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|---|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 152 | | | | | | | |
| BS, T | Mitsubishi | JP 3776439 | | 31/01/2023 | INFORMATION TRANSMITTING METHOD, MOBILE COMMUNICATION SYSTEM AND BASE STATION | 1, 4 | TS25.212 V5.3.0 S2, TS25.212 V5.3.0 S3.3, TS25.212 V5.3.0 S4.6, TS25.212 V5.3.0 S4.6.2.2, TS25.212 V5.3.0 S4.6.2.3, TS25.213 V5.5.0 S5.2.1, TS25.308 V5.3.0 S5.2.1, TS25.308 V5.3.0 S5.2.2.1, TS25.308 V5.3.0 S5.3, TS25.321 V5.7.0 Annex A, TS25.321 V5.7.0 S9.2.3.1 |
| BS, T | Mitsubishi | KR 10-0677004 | | 31/01/2023 | Information Notification Method, Mobile Communication System, and Base Station | 1, 4, 7, 10 | TS25.212 V5.3.0 S2, TS25.212 V5.3.0 S3.3, TS25.212 V5.3.0 S4.6, TS25.212 V5.3.0 S4.6.2.2, TS25.212 V5.3.0 S4.6.2.3, TS25.213 V5.5.0 S5.2.1, TS25.308 V5.3.0 S5.2.1, TS25.308 V5.3.0 S5.2.2.1, TS25.308 V5.3.0 S5.3, TS25.321 V5.7.0 Annex A (normative), TS25.321 V5.7.0 S9.2.3.1, TS25.321 V5.7.0 Table 9.2.3.1 |
| 153 | | | | | | | |
| BS, T | Mitsubishi | JP 3776447 | | 31/01/2023 | INFORMATION TRANSMITTING METHOD, MOBILE COMMUNICATION SYSTEM AND BASE STATION | 1, 5 | TS25.212 V5.3.0 S2, TS25.212 V5.3.0 S3.3, TS25.212 V5.3.0 S4.6, TS25.212 V5.3.0 S4.6.2.2, TS25.212 V5.3.0 S4.6.2.3, TS25.213 V5.5.0 S5.2.1, TS25.308 V5.3.0 S5.2.1, TS25.308 V5.3.0 S5.2.2.1, TS25.308 V5.3.0 S5.3, TS25.321 V5.7.0 Annex A, TS25.321 V5.7.0 S9.2.3.1 |
| BS, T | Mitsubishi | KR 10-0816164 | | 31/01/2023 | Information transmitting method, mobile communication system and base station | 1, 5 | TS25.212 V5.3.0 S2, TS25.212 V5.3.0 S3.3, TS25.212 V5.3.0 S4.6, TS25.212 V5.3.0 S4.6.2.2, TS25.212 V5.3.0 S4.6.2.3, TS25.213 V5.5.0 S5.2.1, TS25.308 V5.3.0 Figure 5.2.2.1-1, TS25.308 V5.3.0 S5.2.1, TS25.308 V5.3.0 S5.2.2.1, TS25.308 V5.3.0 S5.3, TS25.321 V5.7.0 Annex A, TS25.321 V5.7.0 S9.2.3.1, TS25.321 V5.7.0 Table 9.2.3.1 |
| 154 | | | | | | | |
| BS, T | Fujitsu | JP 3734393 | | 29/10/2019 | CDMA MOBILE COMMUNICATION SYSTEM | 5 | TS25.214 V3.12.0 S5.2.1.4.1, TS25.305 V3.11.0 S5, TS25.305 V3.11.0 S5.1 |
| 155 | | | | | | | |
| BS, CN, RNC, T | Mitsubishi | JP 3770899 | | 28/10/2014 | Wideband Speech Reconstruction Method and Wideband Speech Reconstruction Apparatus | 1, 2 | TS26.190 V6.0.0 S4.4 Fig. 3, TS26.190 V6.0.0 S5.2.3, TS26.190 V6.0.0 S6.1, TS26.190 V6.0.0 S6.3.1, TS26.190 V6.0.0 S6.3.2.2, TS26.190 V6.0.0 S6.3.3 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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|--|--------------------------------|----------------------|---|---|---|-------------------------|--|
| <hr/> | | | | | | | |
| 156 BS, CN, RNC, T | Mitsubishi | JP 3770900 | | 28/10/2014 | Wideband Speech Reconstruction Method and Wideband Speech Reconstruction Apparatus | 1, 2 | TS26.190 V6.0.0 S4.4, TS26.190 V6.0.0 S5.3.2, TS26.190 V6.0.0 S6.3.1, TS26.190 V6.0.0 S6.3.2.2, TS26.190 V6.0.0 S6.3.3 Fig. 3 |
| <hr/> | | | | | | | |
| 157 BS, CN, RNC, T | Mitsubishi | JP 3770901 | | 28/10/2014 | Wideband Speech Reconstruction Method and Wideband Speech Reconstruction Apparatus | 1, 2 | TS26.190 V6.0.0 S4.4, TS26.190 V6.0.0 S5.2.3, TS26.190 V6.0.0 S6.3.1, TS26.190 V6.0.0 S6.3.2.2, TS26.190 V6.0.0 S6.3.3 Fig. 3 |
| <hr/> | | | | | | | |
| 158 T | Mitsubishi | JP 3782821 | | 21/04/2020 | Apparatus and method for a telecommunication system | 1, 5 | TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 S4.1, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.8, TS25.331 V3.21.0 Fig. 8.2.2-3, TS25.331 V3.21.0 S10.3.10, TS25.331 V3.21.0 S10.3.5.11, TS25.331 V3.21.0 S8.2.1, TS25.331 V3.21.0 S8.2.2 |
| <hr/> | | | | | | | |
| 159 BS, T | Mitsubishi | JP 3768521 | | 18/08/2020 | A communication method of a telecommunication system, a telecommunication system, a communication method of a base station and a base station in a telecommunication system | 1, 2, 3, 4 | TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 S3.3, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.7.2, TS25.212 V3.11.0 S4.2.7.2.1 |

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|--|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 160 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | EP 1100204 | DE, FR, GB, IT | 09/05/2020 | Multiplexing Method and Multiplexing Device, and Data Signal Transmission Method and Data Signal Transmission Device | 1, 10 | TS25.211 V3.12.0 S5, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3.2 Fig. 1, TS25.212 V3.11.0 S3.3, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.11, TS25.212 V3.11.0 S4.2.12 Fig. 1, TS25.212 V3.11.0 S4.2.12 Fig. 2, TS25.212 V3.11.0 S4.2.8 |
| BS, RNC, T | NTT DoCoMo | US 6956842 | | 09/05/2020 | Multiplexing Method and Multiplexing device and data signal transmission method and data signal transmission device | 1, 13 | TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 S5, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3.2, TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.11, TS25.212 V3.11.0 S4.2.12, TS25.212 V3.11.0 S4.2.8 |
| BS, RNC, T | NTT DoCoMo | JP 3871109 | | 09/05/2020 | Interleaving Method and Transmission Device | 1, 9 | TS25.211 V3.12.0 Fig. 1, TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 S5, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3.2, TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.11, TS25.212 V3.11.0 S4.2.12, TS25.212 V3.11.0 S4.2.8 |
| BS, T | NTT DoCoMo | SG 78522 | | 09/05/2020 | Multiplexing method and multiplexing device, and data signal transmission method and data signal transmission device | 5, 12 | TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 S3.3, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.11, TS25.212 V3.11.0 S4.2.12, TS25.212 V3.11.0 S4.2.3, TS25.212 V3.11.0 S4.2.8, TS25.212 V3.11.0 Table 7 |
| BS, T | NTT DoCoMo | AU 749821. | | 09/05/2020 | Multiplexing method and multiplexing device, and data signal transmission method and data signal transmission device | 5, 12, 15, 20 | TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 Figure 9, TS25.211 V3.12.0 S5.3.2, TS25.211 V3.12.0 S5.3.3.2, TS25.211 V3.12.0 Table 17, TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.11, TS25.212 V3.11.0 S4.2.12, TS25.212 V3.11.0 S4.2.3, TS25.212 V3.11.0 S4.2.8, TS25.212 V3.11.0 S4.2.9, TS25.212 V3.11.0 Table 7 |
| BS, RNC, T | NTT DoCoMo | CA 2336820 | | 09/05/2020 | Data Multiplexing Method and Data Multiplexer, and Data Transmitting Method and Data Transmitter | 1, 9 | TS25.211 V3.12.0 Fig. 1, TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 S5, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3.2, TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 S3.3, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.11, TS25.212 V3.11.0 S4.2.12, TS25.212 V3.11.0 S4.2.8 |

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|--|--------------------------------|----------------------|---|---|---|-------------------------|--|
| BS, T | NTT DoCoMo | CN 00800803 | | 08/05/2020 | Data signal transmission method and data signal transmission device. | 5, 12 | TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.11, TS25.212 V3.11.0 S4.2.12, TS25.212 V3.11.0 S4.2.3, TS25.212 V3.11.0 S4.2.8, TS25.212 V3.11.0 Table 7 |
| BS, RNC, T | NTT DoCoMo | KR 457895 | | 09/05/2020 | Multiplexing method and multiplexing device, and data signal transmission method and data signal transmission device. | 28, 35 | TS25.211 V3.12.0 Fig. 1, TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 Figure 9, TS25.211 V3.12.0 S5, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3.2, TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 Figure 2, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.11, TS25.212 V3.11.0 S4.2.12, TS25.212 V3.11.0 S4.2.8, TS25.212 V3.11.0 Table 7 |
| 161 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | US 6782035 | | 17/04/2018 | Base station apparatus of mobile communication system | 6, 7, 8 | TS25.211 V3.12.0 Fig. 1, TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 Figure 10, TS25.211 V3.12.0 S1, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3.2, TS25.212 V3.11.0 Fig. 10, TS25.212 V3.11.0 S4.2.12.2, TS25.212 V3.11.0 S4.2.9, TS25.212 V3.11.0 S4.2.9.1, TS25.212 V3.11.0 S4.2.9.2, TS25.213 V3.9.0 S4.2.1, TS25.214 V3.12.0 S5.1.2.1, TS25.214 V3.12.0 S5.1.2.2, TS25.214 V3.12.0 S5.1.2.2.1, TS25.214 V3.12.0 S5.1.2.5.1, TS25.214 V3.12.0 S5.1.2.5.2, TS25.214 V3.12.0 S5.1.2.5.3, TS25.214 V3.12.0 S5.2.1.1, TS25.214 V3.12.0 S5.2.1.2.2, TS25.433 V3.14.2 Fig. 24, TS25.433 V3.14.2 S8.2.17.2, TS25.433 V3.14.2 S9.1.36.1 |

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|---|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 162 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | JP 3358972 | | 09/07/2017 | Radio Channel Initial Transmission Scheme for Mobile Communication System | 1, 4 | TS25.211 V3.12.0 Fig. 1, TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3.2, TS25.214 V3.12.0 S4.3.2.1, TS25.214 V3.12.0 S4.3.2.3, TS25.301 V3.11.0 Fig. 4, TS25.301 V3.11.0 Fig. 5, TS25.301 V3.11.0 S5.3.1.1.1, TS25.301 V3.11.0 S5.3.1.1.2.1, TS25.301 V3.11.0 S5.3.1.1.2.2, TS25.302 V3.16.0 S10.2.2.5, TS25.302 V3.16.0 S10.2.2.6, TS25.303 V3.12.0 Fig. 5, TS25.303 V3.12.0 S6.2.1.1.1 |
| BS, RNC, T | NTT DoCoMo | EP 0818893 | DE, FR, GB, IT, SE | 11/07/2017 | Radio Channel Initial Transmission Scheme for Mobile Communication System | 2 | TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 S5.3, TS25.211 V3.12.0 S5.3.2, TS25.214 V3.12.0 S4.3.2.1, TS25.214 V3.12.0 S4.3.2.3, TS25.301 V3.11.0 S5.3.1.1.1, TS25.301 V3.11.0 S5.3.1.1.2.2, TS25.302 V3.16.0 S10.2.1.1, TS25.302 V3.16.0 S10.2.2.5, TS25.302 V3.16.0 S10.2.2.6, TS25.303 V3.12.0 Fig. 5, TS25.303 V3.12.0 S6.2.1.1.1 |
| BS, RNC, T | NTT DoCoMo | US 6073022 | | 11/07/2017 | Radio Channel Initial Transmission Scheme for Mobile Communication System | 4, 10 | TS25.211 V3.12.0 Fig. 1, TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3.2, TS25.214 V3.12.0 S3, TS25.214 V3.12.0 S4.3.2.1, TS25.214 V3.12.0 S4.3.2.3, TS25.301 V3.11.0 Fig. 4, TS25.301 V3.11.0 Fig. 5, TS25.301 V3.11.0 S5.3.1.1.1, TS25.301 V3.11.0 S5.3.1.1.2.1, TS25.301 V3.11.0 S5.3.1.1.2.2, TS25.302 V3.16.0 S10.2.2.5, TS25.302 V3.16.0 S10.2.2.6, TS25.303 V3.12.0 Fig. 5, TS25.303 V3.12.0 S6.2.1.1.1 |
| 163 | | | | | | | |
| BS, RNC, T | NEC | US 6978150 | | 25/03/2023 | Apparatus and method for transmission power balance adjustment in a mobile cellular system | 29, 30, 31 | TS23.002 V3.6.0 Fig. 1, TS23.002 V3.6.0 S5.1, TS25.214 V3.12.0 S5.2.1.2.1, TS25.214 V3.12.0 S5.2.1.2.2, TS25.402 V3.10.0 S5, TS25.433 V3.14.2 S8.3.7.2 Fig. 37, TS25.433 V3.14.2 S9.1.51, TS25.433 V3.14.2 S9.2.2.B |
| BS, RNC, T | NEC | JP 3870925 | | 30/06/2020 | Transmission power control system, control method, base station, and transmission power control method in a base station | 6, 7, 8 | TS23.002 V3.6.0 Fig. 1, TS23.002 V3.6.0 S5.1, TS25.402 V3.10.0 S5, TS25.433 V3.14.2 Fig. 37, TS25.433 V3.14.2 S8.3.7.2, TS25.433 V3.14.2 S9.1.51, TS25.433 V3.14.2 S9.2.2.B |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|--|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 164 CN, RNC, T | NEC | JP 3570508 | | 07/08/2021 | Communication system, method thereof, switching center thereof and base station control station thereof | 40, 41, 42 | TS23.002 V4.8.0 S4.1.3, TS23.002 V4.8.0 S4.2.2.1, TS23.002 V4.8.0 S4.2.2.2, TS23.060 V4.10.0 Fig. 50, TS23.060 V4.10.0 S6.12.1, TS25.413 V4.12.0 S8.2.1, TS25.413 V4.12.0 S8.2.2, TS25.413 V4.12.0 S9.1.3, TS25.413 V4.12.0 S9.2.1.43 |
| 165 T | Mitsubishi | JP 3795060 | | 18/08/2020 | A communication method of a communication terminal | 1, 4 | TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.7.2, TS25.212 V3.11.0 S4.2.7.2.1, TS25.331 V3.20.0 Fig. 8.2.2-3, TS25.331 V3.20.0 S10.2.27, TS25.331 V3.20.0 S10.3.5.1, TS25.331 V3.20.0 S10.3.5.11, TS25.331 V3.20.0 S10.3.5.23, TS25.331 V3.20.0 S8.2.2 |
| 166 T | Mitsubishi | JP 3795061 | | 18/08/2020 | A communication method of a communication terminal | 1, 4 | TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 S3.3, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.2.7.2, TS25.212 V3.11.0 S4.2.7.2.1, TS25.212 V3.11.0 S4.2.7.2.2.1, TS25.331 V3.20.0 Fig. 8.2.2-3, TS25.331 V3.20.0 S10.2.27, TS25.331 V3.20.0 S10.3.5.1, TS25.331 V3.20.0 S10.3.5.11, TS25.331 V3.20.0 S10.3.5.23, TS25.331 V3.20.0 S8.2.2 |
| 167 T | Sharp | JP 3813627 | | 31/08/2012 | Method for improving performances of a mobile radiocommunication system using a power control algorithm * Expiry date of right to license: 31 August 2012 | 1, 2, 3 | TS25.212 V6.6.0 S4.4.3.2, TS25.214 V6.7.0 S5.2.1.3, TS25.331 V6.6.0 S10.3.6.33, TS25.331 V6.6.0 S14.9.1, TS25.331 V6.6.0 S14.9.2, TS25.331 V6.6.0 S8.1.1.1, TS25.401 V6.7.0 S7.2.4.8, TS25.401 V6.7.0 S7.2.4.8.2, TS25.401 V6.7.0 S7.2.4.8.4 |
| 168 T | Mitsubishi | JP 3802914 | | 10/05/2022 | A communication system, base station, and mobile station of mobile communications for carrying out high-speed radio data communication | 2, 3 | TS25.211 V5.7.0 Fig 2A, TS25.211 V5.7.0 Fig. 27, TS25.211 V5.7.0 S5.2.1, TS25.211 V5.7.0 S6.1, TS25.214 V5.11.0 S6A.1, TS25.214 V5.11.0 S6A.1.2, TS25.214 V5.11.0 S6A.2, TS25.214 V5.11.0 Table 7A, TS25.308 V5.7.0 Fig. 6.1.1-1, TS25.308 V5.7.0 S4, TS25.308 V5.7.0 S6.1.1, TS25.331 V5.13.0 S10.2.33, TS25.331 V5.13.0 S10.3.6.23a, TS25.331 V5.13.0 S10.3.6.40a |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

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|---|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 169 | | | | | | | |
| T | Mitsubishi | JP 3805355 | | 16/06/2024 | A channelization assignment that can be applied to an overshoot of HPSK (Hybrid Phase Shift Keying) even when the number of multiplexes of DPDCH (Dedicated Physical Data Channel) is five or more. | 1, 4 | TS25.212 V6.3.0 S4.8.4.1, TS25.213 V6.1.0 Fig. 1, TS25.213 V6.1.0 Fig. 1c, TS25.213 V6.1.0 Fig. 4, TS25.213 V6.1.0 Fig. 7, TS25.213 V6.1.0 S4.1, TS25.213 V6.1.0 S4.2.1, TS25.213 V6.1.0 S4.2.1.3, TS25.213 V6.1.0 S4.3.1.1, TS25.213 V6.1.0 S4.3.1.2, TS25.213 V6.1.0 S4.4.2, TS25.213 V6.1.0 Table 0, TS25.213 V6.1.0 Table 1B, TS25.213 V6.1.0 Table 1C, TS25.213 V6.1.0 Table 1E |
| T | Mitsubishi | KR 10-0769311 | | 16/06/2024 | Communication Apparatus | 4, 17 | TS25.212 V6.3.0 S4.8.4.1, TS25.213 V6.1.0 Fig. 1, TS25.213 V6.1.0 Fig. 1c, TS25.213 V6.1.0 Fig. 4, TS25.213 V6.1.0 Fig. 7, TS25.213 V6.1.0 S3.2, TS25.213 V6.1.0 S4.2.1, TS25.213 V6.1.0 S4.2.1.3, TS25.213 V6.1.0 S4.3.1.1, TS25.213 V6.1.0 S4.3.1.2, TS25.213 V6.1.0 S4.3.1.2.3, TS25.213 V6.1.0 S4.4.2, TS25.213 V6.1.0 Table 0, TS25.213 V6.1.0 Table 1B, TS25.213 V6.1.0 Table 1C, TS25.213 V6.1.0 Table 1E |
| T | Mitsubishi | US 7519105 | | 16/06/2025 | Channel code assignment according to gain factor | 1, 9 | TS25.212 V6.3.0 S4.8.4.1, TS25.213 V6.1.0 Fig. 1, TS25.213 V6.1.0 Fig. 1c, TS25.213 V6.1.0 Fig. 4, TS25.213 V6.1.0 Fig. 7, TS25.213 V6.1.0 S4.1, TS25.213 V6.1.0 S4.2.1, TS25.213 V6.1.0 S4.2.1.3, TS25.213 V6.1.0 S4.3.1.1, TS25.213 V6.1.0 S4.3.1.2, TS25.213 V6.1.0 S4.3.1.2.3, TS25.213 V6.1.0 S4.4.2, TS25.213 V6.1.0 Table 0, TS25.213 V6.1.0 Table 1B, TS25.213 V6.1.0 Table 1C, TS25.213 V6.1.0 Table 1E |
| T | Mitsubishi | CN 100518000 | | 06/06/2025 | Communications Method, Communications Apparatus | 1, 4 | TS25.212 V6.3.0 S4.8.4.1, TS25.213 V6.1.0 Fig. 1, TS25.213 V6.1.0 Fig. 1c, TS25.213 V6.1.0 Fig. 4, TS25.213 V6.1.0 Fig. 7, TS25.213 V6.1.0 S4.1, TS25.213 V6.1.0 S4.2.1, TS25.213 V6.1.0 S4.2.1.3, TS25.213 V6.1.0 S4.3.1.1, TS25.213 V6.1.0 S4.3.1.2, TS25.213 V6.1.0 S4.3.1.2.3, TS25.213 V6.1.0 S4.4.2, TS25.213 V6.1.0 Table 0, TS25.213 V6.1.0 Table 1B, TS25.213 V6.1.0 Table 1C, TS25.213 V6.1.0 Table 1E |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 170 | | | | | | | |
| BS, RNC | NTT DoCoMo | US 7095780 | | 17/04/2018 | Base Station Apparatus of Mobile Communication System | 1, 3 | TS25.211 V3.12.0 Fig. 15, TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 Figure 17, TS25.211 V3.12.0 S5.3.2, TS25.211 V3.12.0 S5.3.3.3, TS25.211 V3.12.0 S5.3.3.4, TS25.211 V3.12.0 S7.1, TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 S4.1, TS25.212 V3.11.0 S4.2, TS25.213 V3.9.0 Figure 8, TS25.213 V3.9.0 Figure 9, TS25.213 V3.9.0 S5.1, TS25.213 V3.9.0 S5.2.2, TS25.401 V3.10.0 S3.1, TS25.402 V3.10.0 S5, TS25.402 V3.10.0 S8.2.1 |
| BS | NTT DoCoMo | EP 1492368 | DE, FR, GB, IT, SE | 17/04/2018 | Base station apparatus and method for mobile communication system | 1, 3 | TS25.211 V3.12.0 Fig. 15, TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 Figure 17, TS25.211 V3.12.0 Figure 29, TS25.211 V3.12.0 S4.1, TS25.211 V3.12.0 S4.1.1, TS25.211 V3.12.0 S4.1.1.1, TS25.211 V3.12.0 S4.1.2, TS25.211 V3.12.0 S4.1.2.1, TS25.211 V3.12.0 S4.1.2.2, TS25.211 V3.12.0 S4.1.2.3, TS25.211 V3.12.0 S5, TS25.211 V3.12.0 S5.3.2, TS25.211 V3.12.0 S5.3.3.3, TS25.211 V3.12.0 S5.3.3.4, TS25.211 V3.12.0 S7.1, TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 S4.1, TS25.212 V3.11.0 S4.2, TS25.213 V3.9.0 Figure 8, TS25.213 V3.9.0 S5.1, TS25.213 V3.9.0 S5.2.2, TS25.401 V3.10.0 S3.1, TS25.402 V3.10.0 S5, TS25.402 V3.10.0 S8.2.1 |
| 171 | | | | | | | |
| T | Mitsubishi | US 7061892 | | 22/08/2022 | Information notification method, mobile communications system, base station, and mobile station | 1, 3 | TS25.212 V5.3.0 S3.3, TS25.212 V5.3.0 S4.6, TS25.308 V5.3.0 S5.2.1, TS25.308 V5.3.0 S5.2.2.1, TS25.308 V5.3.0 S5.3, TS25.321 V5.7.0 Annex A, TS25.321 V5.7.0 S9.2.3.1 |
| BS, T | Mitsubishi | US 7532602 | | 11/12/2024 | Information transmission method, mobile communications system, base station, and mobile station | 6, 9 | TS25.211 V5.8.0 S5.3.3.12, TS25.212 V5.3.0 S4.6, TS25.308 V5.3.0 S5.2.2.1, TS25.308 V5.3.0 S5.3, TS25.321 V5.7.0 Annex A, TS25.321 V5.7.0 S9.2.3, TS25.321 V5.7.0 S9.2.3.1, TS25.321 V5.7.0 Table 9.2.3.1 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 172 | | | | | | | |
| T | Mitsubishi | US 7050413 | | 22/08/2022 | Information transmission method, mobile communications system, base station and mobile station in which data size of identification data is reduced | 1, 4 | TS25.212 V5.3.0 S3.3, TS25.212 V5.3.0 S4.6, TS25.308 V5.3.0 S5.2.1, TS25.308 V5.3.0 S5.2.2.1, TS25.308 V5.3.0 S5.3, TS25.321 V5.7.0 Annex A, TS25.321 V5.7.0 S9.2.3.1 |
| BS, T | Mitsubishi | CN 1258895 | | 11/11/2022 | Information transmission method, mobile communications system, and base station | 1, 3, 5, 7 | TS25.212 V5.3.0 S3.3, TS25.212 V5.3.0 S4.5, TS25.212 V5.3.0 S4.6, TS25.212 V5.3.0 S4.6.2.2, TS25.212 V5.3.0 S4.6.2.3, TS25.308 V5.3.0 Fig 6.2.3-1, TS25.308 V5.3.0 S5.1, TS25.308 V5.3.0 S5.2.2.1, TS25.308 V5.3.0 S5.3, TS25.308 V5.3.0 S6.2.3, TS25.321 V5.7.0 Annex A, TS25.321 V5.7.0 S9.2.3.1, TS25.401 V5.10.0 S3.1, TS25.401 V5.10.0 S6, TS25.401 V5.10.0 S6.1, TS25.401 V5.10.0 S6.1.7 |
| T | Mitsubishi | KR 10-0856604 | | 31/01/2023 | Information notification method, information communication system, base station and mobile station | 4, 13 | TS25.212 V5.3.0 S3.3, TS25.212 V5.3.0 S4.6, TS25.308 V5.3.0 Figure 5.2.2.1-1, TS25.308 V5.3.0 S5.2.1, TS25.308 V5.3.0 S5.2.2.1, TS25.308 V5.3.0 S5.3, TS25.321 V5.7.0 Annex A, TS25.321 V5.7.0 S9.2.3.1, TS25.321 V5.7.0 Table 9.2.3.1 |
| 173 | | | | | | | |
| BS, CN, RNC, T | Mitsubishi | JP 3773509 | | 28/10/2014 | Wideband Speech Reconstruction Method and Wideband Speech Reconstruction Apparatus | 1, 2 | TS26.190 V6.0.0 S4.4, TS26.190 V6.0.0 S6.1, TS26.190 V6.0.0 S6.3.1, TS26.190 V6.0.0 S6.3.2.2, TS26.190 V6.0.0 S6.3.3 |
| 174 | | | | | | | |
| BS, RNC, T | NTT DoCoMo, NTT | JP 2560854 | | 19/09/2009 (Expired) | Method of controlling mobile communications | 1 | TS25.201 V5.0.0 S4.2.3, TS25.211 V5.0.0 S5.3.3.1.1, TS25.215 V5.0.0 S5.1.1, TS25.331 V5.0.0 Fig. 8.1.1-1, TS25.331 V5.0.0 S10.2.48.8.14, TS25.331 V5.0.0 S10.2.48.8.15, TS25.331 V5.0.0 S10.3.7.2, TS25.331 V5.0.0 S10.3.7.33, TS25.331 V5.0.0 S10.3.7.40, TS25.331 V5.0.0 S10.3.7.47, TS25.331 V5.0.0 S14.1.2.3, TS25.331 V5.0.0 S14.1.2.3-1, TS25.331 V5.0.0 S14.1.5.3, TS25.331 V5.0.0 S8.1.1, TS25.331 V5.0.0 S8.1.1.1.2, TS25.331 V5.0.0 S8.3.4.1, TS25.331 V5.0.0 S8.3.4.2, TS25.331 V5.0.0 Table 8.1.1, TS25.401 V5.2.0 S3.1 |
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|--|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 175 | | | | | | | |
| T | Mitsubishi | JP 3847654 | | 05/03/2019 | Communication method | 1 | TS25.101 V3.13.0 Annex A.5, TS25.101 V3.13.0 Table A.22, TS25.211 V5.4.0 S5.2.1, TS25.211 V5.4.0 Table 2, TS25.212 V3.11.0 Fig 15, TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 Fig. 11, TS25.212 V3.11.0 Fig. 14, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.10, TS25.212 V3.11.0 S4.2.11, TS25.212 V3.11.0 S4.2.12.1, TS25.212 V3.11.0 S4.4, TS25.212 V3.11.0 S4.4.3, TS25.212 V3.11.0 S4.4.3.2, TS25.212 V3.11.0 S4.4.4, TS25.214 V5.4.0 S5.1.2.1, TS25.214 V5.4.0 S5.1.2.2.1, TS25.214 V5.4.0 S5.1.2.2.2, TS25.214 V5.4.0 S5.1.2.2.1, TS25.214 V5.4.0 S5.1.2.3, TS25.214 V5.4.0 Table 2 |
| T | Mitsubishi | EP 1689089B1 | DE, FR, GB | 05/03/2019 | Spread spectrum communication method using a compressed mode | 1 | |
| 176 | | | | | | | |
| T | Mitsubishi | JP 3836489 | | 25/04/2020 | Communication method | 1, 5 | TS25.101 V5.11.0 S6.2.1, TS25.101 V5.11.0 S6.2.2, TS25.101 V5.11.0 Table 6.1, TS25.101 V5.11.0 Table 6.1A, TS25.133 V5.11.0 S6.4.2, TS25.213 V5.5.0 Figure 1, TS25.213 V5.5.0 S4.2.1, TS25.214 V5.9.0 S5.1.2.1, TS25.214 V5.9.0 S5.1.2.2.1, TS25.214 V5.9.0 S5.1.2.5.1, TS25.214 V5.9.0 S5.1.2.5A |

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|--|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 177 | | | | | | | |
| T | Mitsubishi | JP 3866275 | | 13/02/2024 | Communications system, communications apparatus, communications terminal and communications method | 3, 4 | TS22.146 V6.7.0 S4, TS22.146 V6.7.0 S4.1, TS22.146 V6.7.0 S4.2, TS25.301 V6.4.0 S5.2.1.1, TS25.301 V6.4.0 S5.3.1.1.1, TS25.301 V6.4.0 S5.3.1.1.2.2, TS25.346 V6.9.0 S5.2.8, TS25.346 V6.9.0 S7.1 |
| T | Mitsubishi | KR 10-0788416 | | 13/02/2024 | Communication system, communication device, communication terminal and communication method | 1, 2 | TS22.146 V6.7.0 S4, TS22.146 V6.7.0 S4.1, TS22.146 V6.7.0 S4.2, TS25.301 V6.4.0 S5.2.1.1, TS25.301 V6.4.0 S5.3.1.1.1, TS25.301 V6.4.0 S5.3.1.1.2.2, TS25.346 V6.9.0 S5.2.8, TS25.346 V6.9.0 S7.1 |
| T | Mitsubishi | US 7352698 | | 13/02/2024 | Communications System, Communications Apparatus, Communications Terminal, And Communications Method | 1, 2 | TS22.146 V6.7.0 S4, TS22.146 V6.7.0 S4.1, TS22.146 V6.7.0 S4.2, TS25.301 V6.4.0 S5.2.1.1, TS25.301 V6.4.0 S5.3.1.1.1, TS25.301 V6.4.0 S5.3.1.1.2.2, TS25.346 V6.9.0 S5.2.8, TS25.346 V6.9.0 S7.1 |
| T | Mitsubishi | CN 100428844 | | 13/02/2024 | Communication system, communication device, communication terminal, and communication method. | 1, 2 | TS22.146 V6.7.0 S4, TS22.146 V6.7.0 S4.1, TS22.146 V6.7.0 S4.2, TS25.301 V6.4.0 S5.2.1.1, TS25.301 V6.4.0 S5.3.1.1.1, TS25.301 V6.4.0 S5.3.1.1.2.2, TS25.346 V6.9.0 S5.2.8, TS25.346 V6.9.0 S7.1 |
| T | Mitsubishi | EP 1599060 | DE, FR, GB | 13/02/2024 | System and method for the reception of an MBMS service and a dedicated service | 2 | TS22.146 V6.7.0 S4, TS22.146 V6.7.0 S4.1, TS22.146 V6.7.0 S4.2, TS25.301 V6.4.0 S5.2.1.1, TS25.301 V6.4.0 S5.3.1.1.1, TS25.301 V6.4.0 S5.3.1.1.2.2, TS25.346 V6.9.0 S5.2.8, TS25.346 V6.9.0 S7.1 |

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|--|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 178 | | | | | | | |
| BS, RNC, T | Mitsubishi | US 7126931 | | 13/12/2018 | Radio communication system and base station employing CDMA *With effect from 1 July 2010, the effective ownership of this patent has been transferred to Sony Corporation: the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license. | 1, 2 | TS25.301 V3.11.0 Fig. 11, TS25.301 V3.11.0 Fig. 13, TS25.301 V3.11.0 Fig. 16, TS25.301 V3.11.0 S5.3.1.1.2.1, TS25.301 V3.11.0 S5.3.1.1.2.2, TS25.301 V3.11.0 S5.6.1, TS25.301 V3.11.0 S5.6.2, TS25.301 V3.11.0 S5.6.4, TS25.301 V3.11.0 S5.6.5.4, TS25.305 V3.11.0 S3.2, TS25.331 V3.21.0 Fig. 8.2.2-3, TS25.331 V3.21.0 S10.2.27, TS25.331 V3.21.0 S10.3.3.1, TS25.331 V3.21.0 S10.3.6.21, TS25.331 V3.21.0 S10.3.6.27, TS25.331 V3.21.0 S8.2.2, TS25.331 V3.21.0 S8.2.2.2, TS25.331 V3.21.0 S8.2.2.3, TS25.331 V3.21.0 S8.2.2.4, TS25.331 V3.21.0 S8.6.3.1, TS25.401 V1.1.1 S6, TS25.401 V1.1.1 S6.1.1, TS25.401 V1.1.1 S7.2.4.5, TS25.402 V3.10.0 S5, TS25.402 V3.10.0 S9.4, TS25.433 V3.14.2 Fig. 30, TS25.433 V3.14.2 S8.3.2.1, TS25.433 V3.14.2 S8.3.2.2, TS25.433 V3.14.2 S9.1.42.1, TS25.433 V3.14.2 S9.1.45, TS25.433 V3.14.2 S9.2.2.14, TS25.433 V3.14.2 S9.2.2.14A, TS25.433 V6.5.0 Figure 32, TS25.433 V6.5.0 S8.3.3.1, TS25.433 V6.5.0 S8.3.3.2 |
| BS, RNC, T | Mitsubishi | EP 1257074 | DE, FR, GB | 10/03/2019 | A method and apparatus for assigning codes *With effect from 1 July 2010, the effective ownership of this patent has been transferred to Sony Corporation: the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license. | 1 | TS25.331 V3.21.0 S10.2.27, TS25.331 V3.21.0 S10.3.3.1, TS25.331 V3.21.0 S10.3.6.21, TS25.331 V3.21.0 S10.3.6.27, TS25.331 V3.21.0 S8.2.2.2, TS25.331 V3.21.0 S8.2.2.3, TS25.331 V3.21.0 S8.6.3.1, TS25.401 V1.1.1 S6, TS25.401 V1.1.1 S6.1.1, TS25.401 V1.1.1 S7.2.4.5, TS25.402 V3.10.0 S5, TS25.402 V3.10.0 S9.4, TS25.433 V3.14.2 S8.3.2.1, TS25.433 V3.14.2 S8.3.2.2, TS25.433 V3.14.2 S8.3.3.1, TS25.433 V3.14.2 S8.3.3.2, TS25.433 V3.14.2 S9.1.42.1, TS25.433 V3.14.2 S9.1.45, TS25.433 V3.14.2 S9.2.2.14, TS25.433 V3.14.2 S9.2.2.14A |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|--|--------------------------------|----------------------|---|---|--|-------------------------|---|
| BS, RNC, T | Mitsubishi | EP 1677447 | DE, FR, GB | 10/03/2019 | A method and apparatus for assigning codes *With effect from 1 July 2010, the effective ownership of this patent has been transferred to Sony Corporation: the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license. | 1 | TS25.331 V3.21.0 S10.2.27, TS25.331 V3.21.0 S10.3.3.1, TS25.331 V3.21.0 S10.3.6.21, TS25.331 V3.21.0 S10.3.6.27, TS25.331 V3.21.0 S8.2.2.2, TS25.331 V3.21.0 S8.2.2.3, TS25.331 V3.21.0 S8.6.3.1, TS25.401 V1.1.1 S3.1, TS25.401 V1.1.1 S6, TS25.401 V1.1.1 S6.1.1, TS25.401 V1.1.1 S7.2.4.5, TS25.402 V3.10.0 S5, TS25.402 V3.10.0 S9.4, TS25.433 V3.14.2 Fig. 30, TS25.433 V3.14.2 Figure 32, TS25.433 V3.14.2 S8.3.2.1, TS25.433 V3.14.2 S8.3.2.2, TS25.433 V3.14.2 S8.3.3.1, TS25.433 V3.14.2 S8.3.3.2, TS25.433 V3.14.2 S9.1.42.1, TS25.433 V3.14.2 S9.1.45, TS25.433 V3.14.2 S9.2.2.14, TS25.433 V3.14.2 S9.2.2.14A |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|--|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 179 | | | | | | | |
| CN, T | FT | EP 0749626 | DE, FR, GB, IT, NL, SE | 04/01/2016 | Speech coding method using linear prediction and algebraic code excitation | 1 | TS26.190 V6.1.1 S1, TS26.190 V6.1.1 S4, TS26.190 V6.1.1 S4.1, TS26.190 V6.1.1 S4.2, TS26.190 V6.1.1 S4.3, TS26.190 V6.1.1 S4.4, TS26.190 V6.1.1 S5, TS26.190 V6.1.1 S5.2.3, TS26.190 V6.1.1 S5.7, TS26.190 V6.1.1 S5.8, TS26.190 V6.1.1 S5.8.1, TS26.190 V6.1.1 S5.8.1.1, TS26.190 V6.1.1 S5.8.1.2, TS26.190 V6.1.1 S5.8.1.3, TS26.190 V6.1.1 S5.8.1.4, TS26.190 V6.1.1 S5.8.1.5, TS26.190 V6.1.1 S5.8.1.6, TS26.190 V6.1.1 S5.8.1.7, TS26.190 V6.1.1 S5.8.1.8, TS26.190 V6.1.1 S5.8.2, TS26.190 V6.1.1 S5.8.3, TS26.190 V6.1.1 S5.9, TS26.190 V6.1.1 Table 10, TS26.190 V6.1.1 Table 11, TS26.190 V6.1.1 Table 4, TS26.190 V6.1.1 Table 6, TS26.190 V6.1.1 Table 7, TS26.190 V6.1.1 Table 8, TS26.190 V6.1.1 Table 9, TS26.290 V6.3.0 Fig.1, TS26.290 V6.3.0 S3, TS26.290 V6.3.0 S3.1, TS26.290 V6.3.0 S4, TS26.290 V6.3.0 S4.1, TS26.290 V6.3.0 S4.2, TS26.290 V6.3.0 S4.3, TS26.290 V6.3.0 S5.3, TS26.290 V6.3.0 S5.3.3, TS26.290 V6.3.0 S5.3.4.2, TS26.290 V6.3.0 S5.3.4.4, TS26.290 V6.3.0 S5.3.4.5, TS26.290 V6.3.0 S5.3.4.5.1, TS26.290 V6.3.0 S5.3.4.5.2, TS26.290 V6.3.0 S5.3.4.5.3, TS26.290 V6.3.0 S5.3.4.6, TS26.290 V6.3.0 S5.8.2, TS26.290 V6.3.0 S5.8.3, TS26.290 V6.3.0 S5.9 |
| CN, T | FT | JP 3481251 | | 04/01/2016 | Speech coding method using linear prediction and algebraic code excitation | 1 | TS26.190 V6.1.1 S1, TS26.190 V6.1.1 S3, TS26.190 V6.1.1 S3.1, TS26.190 V6.1.1 S3.2, TS26.190 V6.1.1 S4, TS26.190 V6.1.1 S4.1, TS26.190 V6.1.1 S4.2, TS26.190 V6.1.1 S4.3, TS26.190 V6.1.1 S5.2, TS26.190 V6.1.1 S5.2.3, TS26.190 V6.1.1 S5.3, TS26.190 V6.1.1 S5.5, TS26.190 V6.1.1 S5.7, TS26.190 V6.1.1 S5.8, TS26.190 V6.1.1 S5.8.1, TS26.190 V6.1.1 S5.8.1.1, TS26.190 V6.1.1 S5.8.1.2, TS26.190 V6.1.1 S5.8.1.3, TS26.190 V6.1.1 S5.8.1.4, TS26.190 V6.1.1 S5.8.1.5, TS26.190 V6.1.1 S5.8.1.6, TS26.190 V6.1.1 S5.8.1.7, TS26.190 V6.1.1 S5.8.1.8, TS26.190 V6.1.1 S5.8.3, TS26.190 V6.1.1 S5.9, TS26.190 V6.1.1 Table 4-11 |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|--|--------------------------------|----------------------|---|---|---|-------------------------|---|
| CN, T | FT | US 5717825 | | 04/01/2016 | Speech coding method using linear prediction and algebraic code excitation | 1 | TS26.190 V6.1.1 S1, TS26.190 V6.1.1 S3.1, TS26.190 V6.1.1 S3.2, TS26.190 V6.1.1 S4, TS26.190 V6.1.1 S4.1, TS26.190 V6.1.1 S4.2, TS26.190 V6.1.1 S4.3, TS26.190 V6.1.1 S5.2, TS26.190 V6.1.1 S5.2.3, TS26.190 V6.1.1 S5.3, TS26.190 V6.1.1 S5.3.8, TS26.190 V6.1.1 S5.5, TS26.190 V6.1.1 S5.6, TS26.190 V6.1.1 S5.7, TS26.190 V6.1.1 S5.8, TS26.190 V6.1.1 S5.8.1.1, TS26.190 V6.1.1 S5.8.1.2, TS26.190 V6.1.1 S5.8.1.3, TS26.190 V6.1.1 S5.8.1.4, TS26.190 V6.1.1 S5.8.1.5, TS26.190 V6.1.1 S5.8.1.6, TS26.190 V6.1.1 S5.8.1.7, TS26.190 V6.1.1 S5.8.1.8, TS26.190 V6.1.1 S5.9 |
| CN, T | FT | KR 10-0389693 | | 04/01/2016 | Speech coding method using linear prediction and algebraic code excitation. | 1 | TS26.190 V6.1.1 S1, TS26.190 V6.1.1 S3.1, TS26.190 V6.1.1 S3.2, TS26.190 V6.1.1 S4, TS26.190 V6.1.1 S4.1, TS26.190 V6.1.1 S4.2, TS26.190 V6.1.1 S4.3, TS26.190 V6.1.1 S5.2, TS26.190 V6.1.1 S5.2.3, TS26.190 V6.1.1 S5.3, TS26.190 V6.1.1 S5.5, TS26.190 V6.1.1 S5.6, TS26.190 V6.1.1 S5.7, TS26.190 V6.1.1 S5.8.1, TS26.190 V6.1.1 S5.8.1.1, TS26.190 V6.1.1 S5.8.1.2, TS26.190 V6.1.1 S5.8.1.3, TS26.190 V6.1.1 S5.8.1.4, TS26.190 V6.1.1 S5.8.1.5, TS26.190 V6.1.1 S5.8.1.6, TS26.190 V6.1.1 S5.8.1.7, TS26.190 V6.1.1 S5.8.1.8, TS26.190 V6.1.1 S5.8.2, TS26.190 V6.1.1 S5.8.3, TS26.190 V6.1.1 S5.9, TS26.190 V6.1.1 Table 10, TS26.190 V6.1.1 Table 11, TS26.190 V6.1.1 Table 4, TS26.190 V6.1.1 Table 5, TS26.190 V6.1.1 Table 6, TS26.190 V6.1.1 Table 7, TS26.190 V6.1.1 Table 8, TS26.190 V6.1.1 Table 9, TS26.290 V6.3.0 Fig.1, TS26.290 V6.3.0 S1, TS26.290 V6.3.0 S2, TS26.290 V6.3.0 S3.1, TS26.290 V6.3.0 S4.1, TS26.290 V6.3.0 S4.2, TS26.290 V6.3.0 S4.3, TS26.290 V6.3.0 S5.3.2.3, TS26.290 V6.3.0 S5.3.3, TS26.290 V6.3.0 S5.3.4.2, TS26.290 V6.3.0 S5.3.4.3, TS26.290 V6.3.0 S5.3.4.4, TS26.290 V6.3.0 S5.3.4.5, TS26.290 V6.3.0 S5.3.4.5.1, TS26.290 V6.3.0 S5.3.4.5.2, TS26.290 V6.3.0 S5.3.4.5.3, TS26.290 V6.3.0 S5.3.4.6 |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|--|--------------------------------|----------------------|---|---|--|-------------------------|--|
| CN, T | FT | CA 2182386 | | 04/01/2016 | Speech Coding Method Using Linear Prediction and algebraic code excitation | 1 | TS26.190 V6.1.1 Foreword, TS26.190 V6.1.1 S1, TS26.190 V6.1.1 S3.1, TS26.190 V6.1.1 S3.2, TS26.190 V6.1.1 S4, TS26.190 V6.1.1 S4.1, TS26.190 V6.1.1 S4.2, TS26.190 V6.1.1 S4.3, TS26.190 V6.1.1 S5.2, TS26.190 V6.1.1 S5.2.3, TS26.190 V6.1.1 S5.3, TS26.190 V6.1.1 S5.5, TS26.190 V6.1.1 S5.6, TS26.190 V6.1.1 S5.7, TS26.190 V6.1.1 S5.8, TS26.190 V6.1.1 S5.8.1, TS26.190 V6.1.1 S5.8.1.1, TS26.190 V6.1.1 S5.8.1.2, TS26.190 V6.1.1 S5.8.1.3, TS26.190 V6.1.1 S5.8.1.4, TS26.190 V6.1.1 S5.8.1.5, TS26.190 V6.1.1 S5.8.1.6, TS26.190 V6.1.1 S5.8.1.7, TS26.190 V6.1.1 S5.8.1.8, TS26.190 V6.1.1 S5.8.2, TS26.190 V6.1.1 S5.8.3, TS26.190 V6.1.1 S5.9, TS26.190 V6.1.1 Table 11, TS26.190 V6.1.1 Table 4, TS26.190 V6.1.1 Table 5 |
| 180 | | | | | | | |
| T | FT | EP 0662674 | DE, FR, GB | 09/01/2015 | Terminal-card system, card and terminal | 1, 15 | TS02 221 V3.17.0 Fig. 7.15, TS02 221 V3.17.0 Intro, TS02 221 V3.17.0 S1, TS02 221 V3.17.0 S11.2.4.1, TS02 221 V3.17.0 S11.2.4.2, TS02 221 V3.17.0 S14.6.1, TS02 221 V3.17.0 S3.1, TS02 221 V3.17.0 S7.4.2, TS02 221 V3.17.0 S7.4.2.1, TS31 111 V3.13.0 S6.5.1, TS31 111 V3.13.0 S6.7, TS31 111 V3.13.0 S6.8, TS31 111 V3.13.0 S6.8.1, TS31 111 V3.13.0 S6.8.2 |

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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|---|--------------------------------|----------------------|--|---|--|-------------------------|--|
| 181 | | | | | | | |
| CN, T | FT | EP 0562890B2 | AT, BE, CH, DE, ES, FR, GB, IE, IT, LI, LU, NL, SE | 29/03/2013 | Mobile Communication Network with Remote Updating of Subscriber Identity Modules in Mobile Terminals | 1, 5 | TS01.02 V6.0.1 S4.3, TS01.02 V6.0.1 S5, TS01.02 V6.0.1 S5.2, TS02.17 V8.0.0 S1, TS02.17 V8.0.0 S6.2, TS11.11 V8.13.0 Annex E, TS11.11 V8.13.0 Annex I, TS11.14 V8.17.0 S3.2, TS11.14 V8.17.0 S7, TS11.14 V8.17.0 S7.1, TS11.14 V8.17.0 S7.1.1, TS11.14 V8.17.0 S7.1.2, TS22.003 V6.0.0 Annex A.1.3.4, TS22.003 V6.0.0 Annex A.1.3.4.2, TS22.038 V3.4.0 S9.1, TS23.040 V3.9.0 Fig 1, TS23.040 V3.9.0 S3.1, TS23.040 V3.9.0 S3.2.3, TS23.040 V3.9.0 S9.2.3, TS23.040 V3.9.0 S9.2.3.22, TS23.040 V3.9.0 S9.2.3.24, TS23.040 V3.9.0 S9.2.3.24.10, TS23.040 V3.9.0 S9.2.3.24.10.1, TS23.040 V3.9.0 S9.2.3.24.10.1.1, TS23.040 V3.9.0 S9.2.3.9 |
| CN, T | FT | HK 1005009 | HK | 29/03/2013 | Mobile communication network with remote updating of subscriber identity modules in mobile terminals. | 1, 5 | TS11.11 V8.13.0 Annex E, TS11.11 V8.13.0 Annex I, TS11.14 V8.17.0 S3.2, TS11.14 V8.17.0 S7.1.1, TS11.14 V8.17.0 S7.1.2, TS22.003 V6.0.0 Annex A.1.3.4, TS22.038 V3.4.0 S9.1, TS23.040 V3.9.0 S3.1, TS23.040 V3.9.0 S3.2.3, TS23.040 V3.9.0 S9.2.3, TS23.040 V3.9.0 S9.2.3.22, TS23.040 V3.9.0 S9.2.3.24, TS23.040 V3.9.0 S9.2.3.24.10.1, TS23.040 V3.9.0 S9.2.3.24.10.1.1, TS23.040 V3.9.0 S9.2.3.9 |
| 182 | | | | | | | |
| T | Mitsubishi | JP 3828120 | | 04/03/2019 | Mobile radio communication system, receiver, transmitter and mobile radio communication method | 2, 4 | TS25.133 V6.0.0 S8.1.2.5, TS25.133 V6.0.0 S8.1.2.5.2.1, TS25.133 V6.0.0 Table 8.7, TS25.211 V5.4.0 Fig. 9, TS25.211 V5.4.0 S5.3.2, TS25.212 V5.3.0 Fig. 11, TS25.212 V5.3.0 S4.4, TS25.215 V5.6.0 Fig. 1, TS25.215 V5.6.0 S6.1.1.1, TS25.215 V5.6.0 S6.1.1.2, TS45.001 V4.4.0 Fig. 1, TS45.001 V4.4.0 Fig. 3, TS45.001 V4.4.0 S5.1 |
| T | Mitsubishi | EP 1480484 | DE, FR, GB | 04/03/2019 | System, receiver, transmitter and corresponding method applied in a mobile radio communication system for observing frequency of another system. | 2, 6 | TS25.133 V6.0.0 S8.1.2.5, TS25.133 V6.0.0 S8.1.2.5.2.1, TS25.133 V6.0.0 Table 8.7, TS25.201 V6.0.0 S4.1.1, TS25.211 V5.4.0 Fig. 9, TS25.211 V5.4.0 S5.3.2, TS25.212 V5.3.0 Fig. 11, TS25.212 V5.3.0 S4.4, TS25.215 V5.6.0 Fig. 1, TS25.215 V5.6.0 S6.1.1.1, TS25.215 V5.6.0 S6.1.1.2, TS45.001 V4.4.0 Fig. 1, TS45.001 V4.4.0 Fig. 3, TS45.001 V4.4.0 S1, TS45.001 V4.4.0 S5.1 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|---|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 183 | | | | | | | |
| BS, T | NTT DoCoMo | JP 3830068 | | 09/04/2018 | Signal Quality detection method in mobile communication and control method for mobile station | 1, 4 | TS25.101 V3.18.0 S8.9, TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 S3.2, TS25.211 V3.12.0 S5.3.2, TS25.212 V3.11.0 Fig. 11, TS25.212 V3.11.0 Fig. 13, TS25.212 V3.11.0 Fig. 14, TS25.212 V3.11.0 S3.1, TS25.212 V3.11.0 S4.4, TS25.212 V3.11.0 S4.4.2, TS25.212 V3.11.0 S4.4.4, TS25.215 V3.13.0 S5.1.1, TS25.215 V3.13.0 S5.1.4, TS25.215 V3.13.0 S5.1.5, TS25.215 V3.13.0 S6.1.1.1, TS25.225 V3.12.0 S5.1.1, TS25.225 V3.12.0 S5.1.5, TS25.331 V3.21.0 S10.2.17, TS25.331 V3.21.0 S10.3.7.16, TS25.331 V3.21.0 S10.3.7.18, TS25.331 V3.21.0 S10.3.7.27, TS25.331 V3.21.0 S10.3.7.29, TS25.331 V3.21.0 S8.4.0, TS25.331 V3.21.0 S8.4.1.3 |
| 184 | | | | | | | |
| BS, T | Siemens | EP 1590982B1 | BE, DE, ES, FR, GB, IT, TR | 26/01/2024 | Communication method and network device in a radio communication system | 1, 12 | TS22.146 V6.6.0 S3.1, TS25.211 V6.7.0 S5.3.3.15, TS25.346 V6.7.0 S1, TS25.346 V6.7.0 S3.3, TS25.346 V6.7.0 S5.1.1, TS25.346 V6.7.0 S5.1.2, TS25.346 V6.7.0 S5.1.5, TS25.346 V6.7.0 S5.2.1, TS25.346 V6.7.0 S5.2.4, TS25.346 V6.7.0 S6.2.1.1, TS25.346 V6.7.0 S6.3, TS25.346 V6.7.0 S7.3 |
| BS, T | Siemens | EA 008051B1 | | 26/01/2024 | Communication method and network device in radio communication system | 1, 12 | TS22.146 V6.6.0 S3.1, TS25.211 V6.7.0 S5.3.3.15, TS25.346 V6.7.0 S1, TS25.346 V6.7.0 S3.3, TS25.346 V6.7.0 S5.1.1, TS25.346 V6.7.0 S5.1.2, TS25.346 V6.7.0 S5.1.5, TS25.346 V6.7.0 S5.2.1, TS25.346 V6.7.0 S5.2.4, TS25.346 V6.7.0 S6.2.1.1, TS25.346 V6.7.0 S6.3, TS25.346 V6.7.0 S7.3 |
| 185 | | | | | | | |
| BS, RNC, T | NEC | JP 3788307 | | 13/12/2019 | Base station selection type transmission power control method and base station | 1, 10, 19 | TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 S5.3.2, TS25.214 V3.12.0 S5.2.1.4.1, TS25.214 V3.12.0 S5.2.1.4.3, TS25.214 V3.12.0 S5.2.1.4.4, TS25.214 V3.12.0 S5.2.1.4.5, TS25.214 V3.12.0 Table 6 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|---|--------------------------------|----------------------|--|---|---|-------------------------|--|
| 186 | | | | | | | |
| BS, RNC, T | Sharp | EP 1252787B1 | DE, FR, GB, IT | 23/12/2020 | Method for operating a mobile radio telephone network | 1 | TS23.060 V6.15.0 S3.2, TS23.060 V6.15.0 S6.9.2.2.1, TS25.323 V6.8.0 S3.2, TS25.323 V6.8.0 S5, TS25.323 V6.8.0 S5.4.1, TS25.323 V6.8.0 S5.6.1.3 |
| BS, RNC, T | Sharp | JP 3909241 | | 23/12/2020 | Method for operating a mobile radiotelephone network | 1 | TS23.060 V6.15.0 S3.2, TS23.060 V6.15.0 S6.9.2.2.1, TS25.323 V6.8.0 S3.2, TS25.323 V6.8.0 S5, TS25.323 V6.8.0 S5.4.1, TS25.323 V6.8.0 S5.6.1.3 |
| BS, RNC, T | Sharp | US 7283511 | | 16/10/2024 | Method for operating a mobile radiotelephone network | 1 | TS23.060 V6.15.0 S3.2, TS23.060 V6.15.0 S6.9.2.2.1, TS25.323 V6.8.0 S3.2, TS25.323 V6.8.0 S5.4.1, TS25.323 V6.8.0 S5.6.1.3 |
| 187 | | | | | | | |
| BS, T | Siemens | EP 1271970 | AT, BE, CH, DE, ES, FR, GB, IT, NL, SE, TR | 27/06/2021 | Methods, devices and software programs for processing and/or evaluating Multimedia Messaging Service (MMS) messages | 1, 10 | TS102 223 V7.4.0 S3.1, TS102 223 V7.4.0 S6.4.37, TS102 223 V7.4.0 S7.7, TS102 223 V7.4.0 S7.7.1, TS21.111 V6.3.0 S4, TS22.038 V7.5.0 Figure 1, TS22.038 V7.5.0 S1, TS22.038 V7.5.0 S4, TS23.140 V6.12.0 S3.1, TS23.140 V6.12.0 S4.2, TS23.140 V6.12.0 S5.1.1, TS23.140 V6.12.0 S7.1.14, TS23.140 V6.12.0 S7.1.14.1, TS23.140 V6.12.0 S7.1.18.2.2, TS23.140 V6.12.0 S8.1.4, TS23.140 V6.12.0 S8.1.4.4, TS23.140 V6.12.0 Table 8, TS31.111 V7.3.0 S7.8 |
| 188 | | | | | | | |
| BS, RNC, T | Mitsubishi | JP 3895361 | | 30/09/2023 | Communication mode control method, mobile communication system, base station control apparatus, base station, and mobile communication terminal | 1 | TS25.133 V6.10.0 S9.2.1.3, TS25.309 V6.3.0 S14.1, TS25.309 V6.3.0 S14.2, TS25.309 V6.3.0 S9.1, TS25.309 V6.3.0 S9.3.1, TS25.309 V6.3.0 S9.3.1.1.1 |
| BS, RNC, T | Mitsubishi | CN 100477829 | | 30/09/2023 | Communication method | 1 | TS25.133 V6.10.0 S9.2.1.3, TS25.309 V6.3.0 S14.1, TS25.309 V6.3.0 S14.2, TS25.309 V6.3.0 S9.1, TS25.309 V6.3.0 S9.3.1, TS25.309 V6.3.0 S9.3.1.1.1 |
| BS, RNC, T | Mitsubishi | EP 1670266 | DE, FR, GB | 30/09/2023 | Communication mode control system | 1 | TS25.133 V6.10.0 S9.2.1.3, TS25.309 V6.3.0 S14.1, TS25.309 V6.3.0 S14.2, TS25.309 V6.3.0 S3.1, TS25.309 V6.3.0 S3.2, TS25.309 V6.3.0 S9.1, TS25.309 V6.3.0 S9.2.1, TS25.309 V6.3.0 S9.3.1, TS25.309 V6.3.0 S9.3.1.1.1 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|---|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 189 | | | | | | | |
| BS, RNC, T | Mitsubishi | JP 3895364 | | 30/09/2023 | Communication mode controlling method, mobile communication system, radio network controller, base station and mobile communication terminal | 1 | TR21.905 V6.9.10 S3, TR21.905 V6.9.10 S4, TS25.133 V6.10.0 S9.2.1.3, TS25.309 V6.3.0 S14.1, TS25.309 V6.3.0 S14.2, TS25.309 V6.3.0 S9.1, TS25.309 V6.3.0 S9.3.1, TS25.309 V6.3.0 S9.3.1.1.1 |
| BS, RNC, T | Mitsubishi | EP 1679933 | DE, FR, GB | 30/09/2023 | Mobile communication system for controlling communication mode | 1 | TR21.905 V6.9.0 S3, TR21.905 V6.9.0 S4, TS25.133 V6.10.0 S9.2.1.3, TS25.309 V6.3.0 S14.1, TS25.309 V6.3.0 S14.2, TS25.309 V6.3.0 S3.1, TS25.309 V6.3.0 S3.2, TS25.309 V6.3.0 S9.1, TS25.309 V6.3.0 S9.2.1, TS25.309 V6.3.0 S9.3.1, TS25.309 V6.3.0 S9.3.1.1.1 |
| 190 | | | | | | | |
| BS, T | Mitsubishi | EP 1612960 | | 05/03/2019 | Spread spectrum communication method | 1 | TS25.211 V5.4.0 S5.2.1, TS25.211 V5.4.0 Table 2, TS25.212 V5.3.0 Fig. 11, TS25.212 V5.3.0 S3.1, TS25.212 V5.3.0 S4.4, TS25.214 V5.4.0 S5.1.2.2, TS25.214 V5.4.0 S5.1.2.2.1, TS25.214 V5.4.0 S5.1.2.2.2.1, TS25.214 V5.4.0 S5.1.2.3, TS25.214 V5.4.0 S5.2.1.2.1, TS25.214 V5.4.0 S5.2.1.2.2, TS25.214 V5.4.0 S5.2.1.3, TS25.214 V5.4.0 Table 2, TS25.321 V5.4.0 S5.1.2.2.1, TS25.321 V5.4.0 S5.1.2.3 |
| 191 | | | | | | | |
| BS, RNC, T | Mitsubishi | JP 3923510 | | 30/03/2024 | Communication Method *With effect from 1 July 2010, the effective ownership of this patent has been transferred to Sony Corporation: the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license. | 1 | TS25.211 V6.7.0 S5.3.3.1, TS25.211 V6.7.0 S5.3.3.1.1, TS25.306 V6.5.0 S4.1.3, TS25.331 V6.6.0 S10.2.16k, TS25.331 V6.6.0 S10.2.16m, TS25.331 V6.6.0 S10.3.9a.12, TS25.331 V6.6.0 S3.2, TS25.331 V6.6.0 S8.7.2, TS25.331 V6.6.0 S8.7.2.3, TS25.331 V6.6.0 S8.7.5.4, TS25.346 V6.5.0 S1, TS25.346 V6.5.0 S10.2, TS25.346 V6.5.0 S3.3, TS25.346 V6.5.0 S5.1.5, TS25.346 V6.5.0 S5.2.3, TS25.346 V6.5.0 S6.2.1.2, TS25.346 V6.5.0 S7.1, TS25.346 V6.5.0 S7.3.1 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|---|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 192 | | | | | | | |
| BS, T | Siemens | EP 1525762B1 | AT, BE, ES, FI, FR, GB, IT, SE | 15/07/2023 | Method, subscriber terminal and radio communication system for transmitting user data messages | 1, 12, 13 | TS11.11 V8.13.0 S10.3.26, TS23.041 V6.2.0 S9.4.1, TS23.041 V6.2.0 S9.4.1.2.2, TS23.041 V6.2.0 S9.4.2.2.2, TS23.246 V6.8.0 S4.1, TS23.246 V6.8.0 S4.2, TS25.324 V6.4.0 S10.1, TS25.324 V6.4.0 S10.2, TS25.324 V6.4.0 S10.3, TS25.324 V6.4.0 S11.2, TS25.324 V6.4.0 S11.9, TS25.324 V6.4.0 S2, TS25.324 V6.4.0 Table 10.3-1, TS25.324 V6.4.0 Table 11.2-1, TS25.324 V6.4.0 Table 11.9-1, TS25.324 V6.4.0 Table 11.9-2, TS25.324 V6.4.0 Table 11.9-3, TS31.102 V6.11.0 Section 4.2.14 |
| BS, T | Siemens | JP 4170985 | | 15/07/2023 | Method, subscriber terminal and radio communication system for transmitting user data messages. | 1, 12, 13 | TS11.11 V8.13.0 S10.3.26, TS23.041 V6.2.0 S9.4.1, TS23.041 V6.2.0 S9.4.1.2.2, TS23.041 V6.2.0 S9.4.2.2.2, TS23.246 V6.8.0 Figure 1, TS23.246 V6.8.0 S4.1, TS23.246 V6.8.0 S4.2, TS25.324 V6.4.0 S10.1, TS25.324 V6.4.0 S10.2, TS25.324 V6.4.0 S10.3, TS25.324 V6.4.0 S11.2, TS25.324 V6.4.0 S11.9, TS25.324 V6.4.0 S2, TS25.324 V6.4.0 Table 10.2-1, TS25.324 V6.4.0 Table 10.3-1, TS25.324 V6.4.0 Table 11.2-1, TS25.324 V6.4.0 Table 11.9-1, TS25.324 V6.4.0 Table 11.9-2, TS25.324 V6.4.0 Table 11.9-3, TS31.102 V6.11.0 S4.1, TS31.102 V6.11.0 Section 4.2.14 |
| 193 | | | | | | | |
| BS, T | Siemens | EP 1512242B1 | CZ, DE, ES, FR, GB, HU, IT, NL, TR | 03/06/2023 | Identical puncturing of UE identification data and load data in the HS-SCCH channel | 1, 3, 4, 5 | TS25.211 V6.7.0 Fig 26A, TS25.211 V6.7.0 S5.3.3.12, TS25.212 V6.7.0 Fig 19, TS25.212 V6.7.0 S2, TS25.212 V6.7.0 S4.2.3.1, TS25.212 V6.7.0 S4.6, TS25.212 V6.7.0 S4.6.1, TS25.212 V6.7.0 S4.6.2.4, TS25.212 V6.7.0 S4.6.3, TS25.212 V6.7.0 S4.6.5, TS25.212 V6.7.0 S4.6.6, TS25.212 V6.7.0 S4.6.7, TS25.212 V6.7.0 S4.6.8, TS25.331 V6.7.0 S10.3.3.14a |
| 194 | | | | | | | |
| BS, T | Mitsubishi | EP 1460774 | DE, ES, FR, GB, IT | 05/03/2019 | Spread spectrum communication apparatus | 1 | TS25.211 V5.4.0 S5.2.1, TS25.211 V5.4.0 Table 2, TS25.212 V5.3.0 Fig. 11, TS25.212 V5.3.0 S3.1, TS25.212 V5.3.0 S4.4, TS25.214 V5.4.0 S5.1.2.1, TS25.214 V5.4.0 S5.1.2.2.1, TS25.214 V5.4.0 S5.1.2.3, TS25.214 V5.4.0 S5.2.1.2, TS25.214 V5.4.0 S5.2.1.2.1, TS25.214 V5.4.0 S5.2.1.3 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|--|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 195 BS, T | Fujitsu | JP 3917519 | | 26/12/2020 | Handover Method and System for CDMA Mobile Communication | 8 | TS25.211 V7.2.0 Fig. 12B, TS25.211 V7.2.0 Fig. 26B, TS25.211 V7.2.0 Fig. 27, TS25.211 V7.2.0 S3.2, TS25.211 V7.2.0 S5.3.2.6, TS25.211 V7.2.0 S5.3.3.13, TS25.211 V7.2.0 S6.1, TS25.214 V7.4.0 S5.2.1.1, TS25.214 V7.4.0 S5.2.1.2.1, TS25.214 V7.4.0 S5.2.1.2.1.1, TS25.214 V7.4.0 S5.2.1.2.2 |
| 196 BS, RNC, T | NEC | JP 3022530 | | 07/12/2018 | A multicast communication system for a CDMA radio communication system | 1 | TS25.346 V6.11.0 Fig. 8.3.1, TS25.346 V6.11.0 Fig. 8.3.3, TS25.346 V6.11.0 S6.2.1.2, TS25.346 V6.11.0 S8.3.1, TS25.346 V6.11.0 S8.3.3, TS25.401 V6.9.0 S3.1, TS25.410 V6.5.0 Fig. 4.1, TS25.410 V6.5.0 S4.1.1 |
| 197 T | Sharp | JP 3919787 | | 21/08/2022 | Mobile station, base station, communication system, transmitting method, receiving method, correspondence procedure, iq multiplexer, and iq multiplex method | 1, 11 | TS25.212 V5.8.0 S3.2, TS25.212 V5.8.0 S3.3, TS25.212 V5.8.0 S4.2.7.1.1, TS25.213 V5.5.0 Fig. 1, TS25.213 V5.5.0 Fig. 7, TS25.213 V5.5.0 S3.2, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.213 V5.5.0 S4.3.1.4, TS25.213 V5.5.0 S4.4.2, TS25.321 V5.8.0 S11.4 |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|---|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 198 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | US 7020209 | | 13/03/2023 | Data Transmission Method, Data Transmission System, Transmitter and Receiver | 1, 13, 25, 35 | TS25.212 V3.11.0 Annex A.1.2, TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 Fig. A.1, TS25.212 V3.11.0 Fig. A.2, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.1.1, TS25.212 V3.11.0 S4.2.1.2, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.3, TS25.302 V3.16.0 Fig. 6, TS25.302 V3.16.0 S5.1, TS25.302 V3.16.0 S7.1.1, TS25.302 V3.16.0 S7.1.2, TS25.302 V3.16.0 S7.1.5, TS25.302 V3.16.0 S7.1.6, TS25.302 V3.16.0 S7.1.7 |
| BS, RNC, T | NTT DoCoMo | JP 3613448 | | 21/06/2019 | Data Transmission Method, Data Transmission System, Transmitter and Receiver | 1, 19, 20 | TS25.212 V3.11.0 Annex A.1.2, TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 Fig. A.1, TS25.212 V3.11.0 Fig. A.2, TS25.212 V3.11.0 S3.2, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.1.1, TS25.212 V3.11.0 S4.2.1.2, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.3, TS25.302 V3.16.0 Annex A, TS25.302 V3.16.0 Fig. 6, TS25.302 V3.16.0 S5.1, TS25.302 V3.16.0 S7.1.1, TS25.302 V3.16.0 S7.1.2, TS25.302 V3.16.0 S7.1.5, TS25.302 V3.16.0 S7.1.6, TS25.302 V3.16.0 S7.1.7, TS25.302 V3.16.0 Table A.1 |
| BS, RNC, T | NTT DoCoMo | AU 755043 | | 05/06/2020 | Data Transmission Method, Data Transmission System, Transmitter and Receiver | 1, 51, 54 | TS25.212 V3.11.0 Annex A.1.2, TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 Fig. A.1, TS25.212 V3.11.0 Fig. A.2, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.1.1, TS25.212 V3.11.0 S4.2.1.2, TS25.212 V3.11.0 S4.2.7, TS25.212 V3.11.0 S4.3, TS25.302 V3.16.0 Fig. 6, TS25.302 V3.16.0 S5.1, TS25.302 V3.16.0 S7.1.1, TS25.302 V3.16.0 S7.1.2, TS25.302 V3.16.0 S7.1.5, TS25.302 V3.16.0 S7.1.6, TS25.302 V3.16.0 S7.1.7 |
| 199 | | | | | | | |
| BS, T | Mitsubishi | JP 3989946 | | 30/03/2024 | Mobile Communication Terminal and Radio Communication System *With effect from 1 July 2010, the effective ownership of this patent has been transferred to Sony Corporation: the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license. | 1 | TS25.211 V6.7.0 S5.3.3.1, TS25.211 V6.7.0 S5.3.3.1.1, TS25.331 V6.6.0 S10.2.16k, TS25.331 V6.6.0 S3.2, TS25.346 V6.5.0 S1, TS25.346 V6.5.0 S10.2, TS25.346 V6.5.0 S3.3, TS25.346 V6.5.0 S5.1.5, TS25.346 V6.5.0 S6.2.1.2, TS25.346 V6.5.0 S7.1, TS25.346 V6.5.0 S7.3.1, TS25.346 V6.5.0 S8.3.5 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|--|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 200 | | | | | | | |
| BS, T | Mitsubishi | EP 1699147 | DE, FR, GB | 30/03/2024 | Mobile communication terminal and radio communication system *With effect from 1 July 2010, the effective ownership of this patent has been transferred to Sony Corporation: the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license. | 1, 2 | TS25.211 V6.4.0 S5.3.3.1, TS25.215 V6.4.0 S5.1.9, TS25.331 V6.6.0 S10.2.16k, TS25.331 V6.6.0 S10.2.16m, TS25.331 V6.6.0 S10.3.9a.12, TS25.331 V6.6.0 S8.7.2.3, TS25.331 V6.6.0 S8.7.5.4, TS25.346 V6.5.0 S1, TS25.346 V6.5.0 S10.2, TS25.346 V6.5.0 S5.1.5, TS25.346 V6.5.0 S5.2.3, TS25.346 V6.5.0 S6.2.1.2, TS25.346 V6.5.0 S7.1, TS25.346 V6.5.0 S7.3.1 |
| BS, T | Mitsubishi | KR 0788418 | | 30/03/2024 | Communication method and radio communication system *With effect from 1 July 2010, the effective ownership of this patent has been transferred to Sony Corporation: the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license. | 5, 7, 9, 10 | TS25.211 V6.7.0 S5.3.3.1, TS25.211 V6.7.0 S5.3.3.1.1, TS25.331 V6.6.0 S10.2.16k, TS25.331 V6.6.0 S10.2.16m, TS25.331 V6.6.0 S10.3.9a.12, TS25.331 V6.6.0 S3.3, TS25.331 V6.6.0 S8.7.2, TS25.331 V6.6.0 S8.7.2.3, TS25.331 V6.6.0 S8.7.5.4, TS25.346 V6.5.0 S1, TS25.346 V6.5.0 S10.2, TS25.346 V6.5.0 S3.3, TS25.346 V6.5.0 S5.1.5, TS25.346 V6.5.0 S5.2.3, TS25.346 V6.5.0 S6.2.1.2, TS25.346 V6.5.0 S7, TS25.346 V6.5.0 S7.1, TS25.346 V6.5.0 S7.3.1 |
| BS, T | Mitsubishi | RU 2328825 | | 30/03/2024 | Mobile communications terminal and radio communication system. *With effect from 1 July 2010, the effective ownership of this patent has been transferred to Sony Corporation: the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license. | 7, 10, 13, 15 | TS25.211 V6.7.0 S5.3.3.1, TS25.211 V6.7.0 S5.3.3.1.1, TS25.331 V6.6.0 Figure 8.7.2-1, TS25.331 V6.6.0 S10.2.16k, TS25.331 V6.6.0 S10.2.16m, TS25.331 V6.6.0 S10.3.9a.12, TS25.331 V6.6.0 S3.3, TS25.331 V6.6.0 S8.7.2, TS25.331 V6.6.0 S8.7.2.3, TS25.331 V6.6.0 S8.7.5.4, TS25.346 V6.5.0 Annex B: Table 2, TS25.346 V6.5.0 S1, TS25.346 V6.5.0 S10.2, TS25.346 V6.5.0 S3.3, TS25.346 V6.5.0 S5.1.5, TS25.346 V6.5.0 S5.2.3, TS25.346 V6.5.0 S6.2.1.2, TS25.346 V6.5.0 S7.1, TS25.346 V6.5.0 S7.3.1 |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|---|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 201 | | | | | | | |
| BS, RNC, T | Mitsubishi | EP 1610481 | DE, FR, GB | 10/03/2019 | A method and apparatus for assigning codes *With effect from 1 July 2010, the effective ownership of this patent has been transferred to Sony Corporation: the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license. | 1 | TS25.331 V3.21.0 S10.2.27, TS25.331 V3.21.0 S10.3.3.1, TS25.331 V3.21.0 S10.3.6.21, TS25.331 V3.21.0 S10.3.6.27, TS25.331 V3.21.0 S8.2.2.2, TS25.331 V3.21.0 S8.2.2.3, TS25.331 V3.21.0 S8.6.3.1, TS25.401 V1.1.1 S3.1, TS25.401 V1.1.1 S6, TS25.401 V1.1.1 S6.1.1, TS25.401 V1.1.1 S7.2.4.5, TS25.402 V3.10.0 S5, TS25.402 V3.10.0 S9.4, TS25.433 V3.14.2 Fig. 30, TS25.433 V3.14.2 Figure 32, TS25.433 V3.14.2 S8.3.2.1, TS25.433 V3.14.2 S8.3.2.2, TS25.433 V3.14.2 S8.3.3.1, TS25.433 V3.14.2 S8.3.3.2, TS25.433 V3.14.2 S9.1.42.1, TS25.433 V3.14.2 S9.1.45, TS25.433 V3.14.2 S9.2.2.14, TS25.433 V3.14.2 S9.2.2.14AO |
| 202 | | | | | | | |
| T | Mitsubishi | EP 1699141 | DE, FR, GB | 05/03/2019 | Spread spectrum communication method | 1 | TS25.101 V3.13.0 Annex A.5, TS25.101 V3.13.0 Table A.22, TS25.211 V5.4.0 S5.2.1, TS25.211 V5.4.0 Table 2, TS25.212 V3.11.0 Fig 15, TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 Fig. 11, TS25.212 V3.11.0 Fig. 14, TS25.212 V3.11.0 S1, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.10, TS25.212 V3.11.0 S4.2.11, TS25.212 V3.11.0 S4.2.12, TS25.212 V3.11.0 S4.2.12.1, TS25.212 V3.11.0 S4.4, TS25.212 V3.11.0 S4.4.3, TS25.212 V3.11.0 S4.4.3.2, TS25.212 V3.11.0 S4.4.4, TS25.214 V5.4.0 S5.1.2.1, TS25.214 V5.4.0 S5.1.2.2, TS25.214 V5.4.0 S5.1.2.2.1, TS25.214 V5.4.0 S5.1.2.2.2, TS25.214 V5.4.0 S5.1.2.2.1, TS25.214 V5.4.0 S5.1.2.3, TS25.214 V5.4.0 Table 2 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|---|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 203 | | | | | | | |
| CN, T | FT | EP 0511095 | DE, FR, GB, IT, NL | 22/04/2012 | Coding and decoding method and apparats for a digital signal | 1, 4, 7, 12, 14 | TS26.403 V6.0.0 Figure 1, TS26.403 V6.0.0 S5, TS26.403 V6.0.0 S5.1, TS26.403 V6.0.0 S5.3, TS26.410 V6.2.0 S1, TS26.410 V6.2.0 S2, TS26.410 V6.2.0 S4, TS26.410 V6.2.0 S4.1, TS26.410 V6.2.0 S4.3.1, TS26.410 V6.2.0 transform.c |
| CN, T | FT | JP 3147984 | | 24/04/2012 | Coding and decoding method and apparatus for a digital signal. | 1 | TS26.403 V6.0.0 Figure 1, TS26.403 V6.0.0 S5.1, TS26.403 V6.0.0 S5.3, TS26.410 V6.2.0 S1, TS26.410 V6.2.0 S2, TS26.410 V6.2.0 S4.1, TS26.410 V6.2.0 S4.3.1, TS26.410 V6.2.0 Table 4, TS26.410 V6.2.0 Table 7, TS26.410 V6.2.0 transform.c |
| CN, T | FT | US 5363096 | | 08/11/2011 | Coding and decoding method and apparatus for a digital signal. | 1 | TS26.401 V7.0.0 S2, TS26.401 V7.0.0 S7, TS26.403 V7.0.0 figure 1, TS26.403 V7.0.0 S5.1, TS26.403 V7.0.0 S5.3, TS26.410 V7.0.0 S4.1, TS26.410 V7.0.0 table 4, TS26.410 V7.0.0 transform c |
| CN, T | FT | CA 2066471 | | 24/04/2012 | Coding and decoding method and apparatus for a digital signal | 1 | TS26.403 V6.0.0 Figure 1, TS26.403 V6.0.0 S5, TS26.403 V6.0.0 S5.1, TS26.403 V6.0.0 S5.3, TS26.410 V6.2.0 S4, TS26.410 V6.2.0 S4.1, TS26.410 V6.2.0 Table 4, TS26.410 V6.2.0 transform.c |
| 204 | | | | | | | |
| T | Mitsubishi | JP 4015162 | | 30/06/2025 | Communication system, communication device, communication terminal and communication method | 1, 3 | TS22.146 V6.7.0 S4, TS22.146 V6.7.0 S4.1, TS22.146 V6.7.0 S4.2, TS25.301 V6.4.0 S5.2.1.1, TS25.301 V6.4.0 S5.3.1.1.1, TS25.301 V6.4.0 S5.3.1.1.2.2, TS25.346 V6.9.0 S5.2.8, TS25.346 V6.9.0 S7.1 |
| T | Mitsubishi | KR 100788419 | | 13/02/2024 | Communication system, communication device, communication terminal, and communication method. | 1, 3 | TS22.146 V6.7.0 S4, TS22.146 V6.7.0 S4.1, TS22.146 V6.7.0 S4.2, TS25.301 V6.4.0 S5.2.1.1, TS25.301 V6.4.0 S5.3.1.1.1, TS25.301 V6.4.0 S5.3.1.1.2.2, TS25.346 V6.9.0 S5.2.8, TS25.346 V6.9.0 S7.1 |
| 205 | | | | | | | |
| BS, CN, RNC, T | Mitsubishi | EP 1596368 | DE, FI, FR, GB, IT, SE | 06/12/2018 | Method and apparatus for speech decoding | 1 | TS26.090 V6.0.0 Fig 2, TS26.090 V6.0.0 Fig 4, TS26.090 V6.0.0 S3.1, TS26.090 V6.0.0 S4.3, TS26.090 V6.0.0 S4.4, TS26.090 V6.0.0 S5.7.1, TS26.090 V6.0.0 S6.1 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|---|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 206 | | | | | | | |
| T | Mitsubishi | KR 10-0788420 | | 13/02/2024 | Communication system, communication device, communication terminal and communications method | 1, 2 | TS22.146 V6.7.0 S4, TS22.146 V6.7.0 S4.1, TS22.146 V6.7.0 S4.2, TS25.301 V6.4.0 S5.2.1.1, TS25.301 V6.4.0 S5.3.1.1.1, TS25.301 V6.4.0 S5.3.1.1.2, TS25.301 V6.4.0 S5.3.1.1.2.2, TS25.346 V6.9.0 S5.2.8, TS25.346 V6.9.0 S7.1 |
| 207 | | | | | | | |
| BS, RNC, T | NEC | JP 4003089 | | 09/05/2025 | Transport format combination selecting method, wireless communication system and mobile station | 8, 14 | TS25.133 V6.20.0 S6.4.2, TS25.133 V6.20.0 S6.5, TS25.211 V6.9.0 S5.2.1, TS25.211 V6.9.0 S5.2.1.3, TS25.213 V6.5.0 Figure 1, TS25.213 V6.5.0 Figure 1A, TS25.213 V6.5.0 S4.2.1, TS25.213 V6.5.0 S4.2.1.1, TS25.213 V6.5.0 S4.2.1.3, TS25.321 V6.14.0 S11.8.1.4, TS25.321 V6.14.0 S3.1.2, TS25.321 V6.14.0 S3.2 |
| 208 | | | | | | | |
| BS, RNC | NTT DoCoMo | JP 3214860 | | 04/03/2017 | Signal transmitting method, transmitter, receiver, and spread-spectrum code synchronizing method for mobile communication system | 1 | TS25.201 V3.4.0 S4, TS25.211 V3.12.0 S5, TS25.213 V3.8.0 S4, TS25.213 V3.8.0 S5 |
| BS, RNC | NTT DoCoMo | US 6167037 | | 04/03/2017 | SIGNAL TRANSMITTING METHOD, TRANSMITTER, RECEIVER, AND SPREAD-SPECTRUM CODE SYNCHRONIZING METHOD FOR MOBILE COMMUNICATION SYSTEM | 1 | TS25.201 V3.4.0 S4.2.1, TS25.201 V3.4.0 S4.2.3, TS25.211 V3.12.0 Fig. 15, TS25.211 V3.12.0 Fig. 18, TS25.211 V3.12.0 S5.3.3.3, TS25.211 V3.12.0 S5.3.3.5, TS25.213 V3.8.0 Fig. 4, TS25.213 V3.8.0 Fig. 8, TS25.213 V3.8.0 Fig. 9, TS25.213 V3.8.0 S4.1, TS25.213 V3.8.0 S4.3.1.1, TS25.213 V3.8.0 S5.1, TS25.213 V3.8.0 S5.2.1, TS25.213 V3.8.0 S5.2.2 |
| BS, T | NTT DoCoMo | EP 0825737 | DE, GB, IT, SE | 04/03/2017 | Signal transmission method, transmitter and receiver in mobile communication system | 8 | TS25.201 V3.4.0 S4.2.1, TS25.201 V3.4.0 S4.2.3, TS25.211 V3.12.0 S5, TS25.211 V3.12.0 S5.3.3.3, TS25.211 V3.12.0 S5.3.3.5, TS25.213 V3.9.0 S4.1, TS25.213 V3.9.0 S4.3.1.1, TS25.213 V3.9.0 S5.1, TS25.213 V3.9.0 S5.2.1, TS25.213 V3.9.0 S5.2.2, TS25.214 V3.12.0 Annex C |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|---|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 209 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | JP 3884774 | | 17/04/2018 | Base station apparatus of mobile communication system | 1, 3, 5 | TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 S5.3.2, TS25.211 V3.12.0 S5.3.3.2, TS25.211 V3.12.0 Table 11, TS25.211 V3.12.0 Table 12, TS25.211 V3.12.0 Table 17 |
| BS, T | NTT DoCoMo | EP 1499039 | DE, FR, GB, IT, SE | 17/04/2018 | Transmission apparatus of mobile communication system | 1, 3, 5 | TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 S5.3.2, TS25.211 V3.12.0 S5.3.3.2, TS25.211 V3.12.0 Table 11, TS25.211 V3.12.0 Table 12, TS25.211 V3.12.0 Table 17 |
| BS, T | NTT DoCoMo | CA 2424556 | | 17/04/2018 | Base station apparatus of mobile communication system. | 1, 3, 5 | TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 Figure 9, TS25.211 V3.12.0 S3.1, TS25.211 V3.12.0 S5.3.2, TS25.211 V3.12.0 S5.3.3.2, TS25.211 V3.12.0 Table 11, TS25.211 V3.12.0 Table 12, TS25.211 V3.12.0 Table 17 |
| 210 | | | | | | | |
| T | Sharp | JP 4024837 | | 21/08/2022 | Mobile station, base station, communication system, transmitting method, correspondence procedure, IQ multiplexer and IQ multiplex method | 1 | TS25.212 V5.8.0 S4.2.7, TS25.212 V5.8.0 S4.2.7.1.1, TS25.213 V5.5.0 Fig. 1, TS25.213 V5.5.0 Figure 7, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.213 V5.5.0 S4.4.1, TS25.213 V5.5.0 S4.4.2, TS25.321 V5.8.0 S11.4, TS25.331 V5.8.0 S8.2.2.2 |
| 211 | | | | | | | |
| T | Sharp | JP 4024838 | | 21/08/2022 | Mobile Station, base station, communication system transmitting method, receiving method, correspondence procedure, IQ multiplexer and IQ multiplex method | 1 | TS25.212 V5.8.0 S3.2, TS25.212 V5.8.0 S3.3, TS25.212 V5.8.0 S4.2.7.1.1, TS25.213 V5.5.0 Figure 1, TS25.213 V5.5.0 Figure 7, TS25.213 V5.5.0 S4, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.213 V5.5.0 S4.4.2, TS25.321 V5.8.0 S11.4 |
| 212 | | | | | | | |
| T | Sharp | JP 4024840 | | 21/08/2022 | Mobile Station, base station, communication system, transmitting method, receiving method, correspondence procedure IQ multiplexer and IQ multiplex method | 1 | TS25.212 V5.8.0 S4.2.7, TS25.212 V5.8.0 S4.2.7.1.1, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1 Figure 1, TS25.213 V5.5.0 S4.4.1, TS25.213 V5.5.0 S4.4.2 Fig. 7, TS25.321 V5.8.0 S11.4, TS25.331 V5.8.0 S8.2.2 |
| 213 | | | | | | | |
| T | Sharp | JP 4024845 | | 21/08/2022 | Mobile Station, base station, communication system, transmitting method, receiving method, correspondence procedure IQ multiplexer and IQ multiplex method | 1 | TS25.212 V5.8.0 S4.2.7, TS25.212 V5.8.0 S4.2.7.1.1, TS25.213 V5.5.0 Fig. 1, TS25.213 V5.5.0 Figure 7, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.213 V5.5.0 S4.4.1, TS25.213 V5.5.0 S4.4.2, TS25.321 V5.8.0 S11.4, TS25.331 V5.8.0 S8.2.2.2 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|---|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 214 | | | | | | | |
| BS, T | Mitsubishi | KR 0788417 | | 30/03/2024 | Communication Method and Radio Communication System *With effect from 1 July 2010, the effective ownership of this patent has been transferred to Sony Corporation: the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license. | 19, 22, 24, 26 | TS25.211 V6.7.0 S5.3.3.1, TS25.211 V6.7.0 S5.3.3.1.1, TS25.331 V6.6.0 S10.2.16k, TS25.331 V6.6.0 S10.2.16m, TS25.331 V6.6.0 S10.3.9a.12, TS25.331 V6.6.0 S3.3, TS25.331 V6.6.0 S8.7.2, TS25.331 V6.6.0 S8.7.2.3, TS25.331 V6.6.0 S8.7.5.4, TS25.346 V6.5.0 S1, TS25.346 V6.5.0 S10.2, TS25.346 V6.5.0 S3.3, TS25.346 V6.5.0 S5.1.5, TS25.346 V6.5.0 S5.2.3, TS25.346 V6.5.0 S6.2.1.2, TS25.346 V6.5.0 S7, TS25.346 V6.5.0 S7.1, TS25.346 V6.5.0 S7.3.1 |
| BS, T | Mitsubishi | EP 1865629 | DE, FR, GB | 30/03/2024 | Mobile Communications Terminal and Radio Communication System *With effect from 1 July 2010, the effective ownership of this patent has been transferred to Sony Corporation: the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license. | 1, 2 | TS25.211 V6.7.0 S5.3.3.1, TS25.211 V6.7.0 S5.3.3.1.1, TS25.215 V6.4.0 S5.1.10, TS25.215 V6.4.0 S5.1.9, TS25.331 V6.6.0 Figure 8.7.2-1, TS25.331 V6.6.0 S10.2.16k, TS25.331 V6.6.0 S10.2.16m, TS25.331 V6.6.0 S10.3.9a.12, TS25.331 V6.6.0 S3.3, TS25.331 V6.6.0 S8.7.2, TS25.331 V6.6.0 S8.7.2.3, TS25.331 V6.6.0 S8.7.5.4, TS25.346 V6.5.0 S1, TS25.346 V6.5.0 S10.2, TS25.346 V6.5.0 S3.3, TS25.346 V6.5.0 S5.1.5, TS25.346 V6.5.0 S5.2.3, TS25.346 V6.5.0 S6.2.1.2, TS25.346 V6.5.0 S7, TS25.346 V6.5.0 S7.1, TS25.346 V6.5.0 S7.3.1 |
| BS, T | Mitsubishi | RU 2372718 | | 30/03/2024 | Mobile communications terminal and radio communication system *With effect from 1 July 2010, the effective ownership of this patent has been transferred to Sony Corporation: the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license. | 8, 10 | TS25.211 V6.7.0 S5.3.3.1, TS25.211 V6.7.0 S5.3.3.1.1, TS25.215 V6.4.0 S5.1.10, TS25.215 V6.4.0 S5.1.9, TS25.331 V6.6.0 Figure 8.7.2-1, TS25.331 V6.6.0 S10.2.16k, TS25.331 V6.6.0 S10.2.16m, TS25.331 V6.6.0 S10.3.9a.12, TS25.331 V6.6.0 S3.3, TS25.331 V6.6.0 S8.7.2, TS25.331 V6.6.0 S8.7.2.3, TS25.331 V6.6.0 S8.7.5.4, TS25.346 V6.5.0 Annex B: Table 2, TS25.346 V6.5.0 S1, TS25.346 V6.5.0 S10.2, TS25.346 V6.5.0 S3.3, TS25.346 V6.5.0 S5.1.5, TS25.346 V6.5.0 S5.2.3, TS25.346 V6.5.0 S6.2.1.2, TS25.346 V6.5.0 S7, TS25.346 V6.5.0 S7.1, TS25.346 V6.5.0 S7.3.1 |
| 215 | | | | | | | |
| T | Panasonic | EP 1523111 | DE, FR, GB | 25/06/2021 | Communication terminal apparatus | 1 | TS25.214 V5.11.0 S6A.1.2, TS25.214 V5.11.0 S6A.2, TS25.214 V5.11.0 Table 7A |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|--|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 216 T | Sharp | JP 4024836 | | 21/08/2022 | MOBILE STATION, BASE STATION, COMMUNICATION SYSTEM, TRANSMITTING METHOD, RECEIVING METHOD, CORRESPONDENCE PROCEDURE, IQ MULTIPLEXER, AND IQ MULTIPLEX METHOD | 1 | TS25.212 V5.8.0 S3.2, TS25.212 V5.8.0 S3.3, TS25.212 V5.8.0 S4.2.7.1.1, TS25.213 V5.5.0 Fig. 7, TS25.213 V5.5.0 Figure 1, TS25.213 V5.5.0 S4, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.213 V5.5.0 S4.4.2, TS25.321 V5.8.0 S11.4 |
| 217 T | Sharp | JP 4024839 | | 21/08/2022 | MOBILE STATION, BASE STATION, COMMUNICATION SYSTEM, TRANSMITTING METHOD, RECEIVING METHOD, CORRESPONDENCE PROCEDURE, IQ MULTIPLEXER, AND IQ MULTIPLEX METHOD | 1 | TS25.212 V5.8.0 S4.2.7, TS25.212 V5.8.0 S4.2.7.1.1, TS25.213 V5.5.0 Fig. 1, TS25.213 V5.5.0 Fig. 7, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.213 V5.5.0 S4.4.1, TS25.213 V5.5.0 S4.4.2, TS25.321 V5.8.0 S11.4, TS25.331 V5.8.0 S8.2.2 |
| 218 T | Sharp | JP 4024841 | | 21/08/2021 | MOBILE STATION, BASE STATION, COMMUNICATION SYSTEM, TRANSMITTING METHOD, RECEIVING METHOD, CORRESPONDENCE PROCEDURE, IQ MULTIPLEXER, AND IQ MULTIPLEX METHOD | 1 | TS25.212 V5.8.0 S4.2.7, TS25.212 V5.8.0 S4.2.7.1.1, TS25.213 V5.5.0 Fig. 1, TS25.213 V5.5.0 Fig. 7, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.213 V5.5.0 S4.2.2, TS25.213 V5.5.0 S4.4.1, TS25.213 V5.5.0 S4.4.2, TS25.321 V5.8.0 S11.4, TS25.331 V5.8.0 S8.2.2.2 |
| 219 T | Sharp | JP 4024842 | | 21/08/2021 | MOBILE STATION, BASE STATION, COMMUNICATION SYSTEM, TRANSMITTING METHOD, RECEIVING METHOD, CORRESPONDENCE PROCEDURE, IQ MULTIPLEXER, AND IQ MULTIPLEX METHOD | 1 | TS25.212 V5.8.0 S3.2, TS25.212 V5.8.0 S3.3, TS25.212 V5.8.0 S4.2.7.1.1, TS25.213 V5.5.0 Fig. 1, TS25.213 V5.5.0 Fig. 7, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1, TS25.213 V5.5.0 S4.2.1, TS25.213 V5.5.0 S4.4.2, TS25.321 V5.8.0 S11.4 |
| 220 T | Sharp | JP 4024843 | | 21/08/2021 | MOBILE STATION, BASE STATION, COMMUNICATION SYSTEM, TRANSMITTING METHOD, RECEIVING METHOD, CORRESPONDENCE PROCEDURE, IQ MULTIPLEXER, AND IQ MULTIPLEX METHOD | 1 | TS25.212 V5.8.0 S4.2.7, TS25.212 V5.8.0 S4.2.7.1.1, TS25.213 V5.5.0 S4.1, TS25.213 V5.5.0 S4.2.1 Figure 1, TS25.213 V5.5.0 S4.4.1, TS25.213 V5.5.0 S4.4.2 Fig. 7, TS25.321 V5.8.0 S11.4, TS25.331 V5.8.0 S8.2.2 |

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|--|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 221 T | Panasonic | EP 1337075 | DE, ES, FR, GB, IT | 17/05/2020 | Hybrid ARQ system with data and control channel for packet data transmission | 13 | TS25.212 V5.10.0 S4.6, TS25.212 V5.10.0 S4.6.2.3, TS25.213 V5.6.0 S5.2.1, TS25.308 V5.7.0 S3.1, TS25.308 V5.7.0 S5.2.1, TS25.308 V5.7.0 S5.2.2.1, TS25.308 V5.7.0 S6.1, TS25.308 V5.7.0 S6.1.4, TS25.308 V5.7.0 S7.1.2.1, TS25.321 V5.13.0 S11.6.2.1, TS25.321 V5.13.0 S11.6.2.2 |
| 222 BS, T | Panasonic | EP 1253759 | DE, FR, GB | 27/12/2021 | Communication terminal apparatus | 1, 9, 10 | TS25.101 V5.20.0 S5.2, TS25.101 V5.20.0 S9.2.1.2, TS25.101 V5.20.0 Table 5, TS25.101 V5.20.0 Table 9.4, TS25.201 V5.3.0 S4.1.2, TS25.212 V5.10.0 S4.5, TS25.212 V5.10.0 S4.5.7, TS25.212 V5.10.0 S4.6.2.1, TS25.212 V5.10.0 Table 11, TS25.212 V5.10.0 Table 12, TS25.213 V5.6.0 Fig.8, TS25.213 V5.6.0 S5.1, TS25.321 V5.13.0 S11.6.2.2, TS25.321 V5.13.0 S4.2.3.3, TS25.321 V5.13.0 S4.2.4, TS25.321 V5.13.0 S4.2.4.3 |
| 223 BS, T | Panasonic | JP 3286308 | | 08/05/2018 | A radio communication system | 1 | TS25.133 V5.18.0 S7.1.1, TS25.201 V5.3.0 S4.2.4, TS25.211 V5.8.0 Figure 1, TS25.211 V5.8.0 Figure 9, TS25.211 V5.8.0 S5.2.1, TS25.211 V5.8.0 S5.3.2, TS25.211 V5.8.0 S7.6.3 |
| 224 T | Panasonic | JP 3668492 | | 30/07/2023 | A reception apparatus | 1 | TS25.211 V5.8.0 Figure 2A, TS25.211 V5.8.0 S5.2.1, TS25.211 V5.8.0 S5.3.3.13, TS25.212 V5.10.0 S4.7.1.1, TS25.212 V5.10.0 Table 13A, TS25.214 V5.11.0 S6A.1.1, TS25.308 V5.7.0 Figure 5.2.2.1-1, TS25.308 V5.7.0 S5.2.2.1, TS25.321 V5.13.0 S11.6.2, TS25.321 V5.13.0 S11.6.2.2 |

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|---|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 225 | | | | | | | |
| BS, T | Panasonic | JP 3756490 | | 18/11/2022 | A data transmission apparatus | 6 | TS25.101 V5.20.0 S9.2.1.2, TS25.101 V5.20.0 Table 9.4, TS25.211 V5.8.0 S5.3.3.13, TS25.212 V5.10.0 Figure 16, TS25.212 V5.10.0 S4.5, TS25.212 V5.10.0 S4.5.4, TS25.212 V5.10.0 S4.5.4.3, TS25.212 V5.10.0 S4.5.7, TS25.212 V5.10.0 S4.6.2.1, TS25.212 V5.10.0 Table 11, TS25.212 V5.10.0 Table 12, TS25.213 V5.6.0 Fig.8, TS25.213 V5.6.0 S5.1, TS25.213 V5.6.0 Table 3A, TS25.301 V5.6.0 S5.3.1.2, TS25.321 V5.13.0 S11.6.1.3, TS25.321 V5.13.0 S11.6.2.1, TS25.321 V5.13.0 S4.2.3.3, TS25.321 V5.13.0 S4.2.4, TS25.321 V5.13.0 S4.2.4.3 |
| 226 | | | | | | | |
| BS, T | Panasonic | JP 3756491 | | 18/11/2022 | A data transmission apparatus | 5 | TS25.211 V5.8.0 S5.3.3.13, TS25.212 V5.10.0 Figure 16, TS25.212 V5.10.0 S4.5, TS25.212 V5.10.0 S4.5.7, TS25.212 V5.10.0 S4.6.2.1, TS25.212 V5.10.0 Table 11, TS25.213 V5.6.0 Figure 8, TS25.213 V5.6.0 S5.1, TS25.213 V5.6.0 Table 3A, TS25.301 V5.6.0 S5.3.1.2, TS25.321 V5.13.0 S11.6.1.3, TS25.321 V5.13.0 S11.6.2.1, TS25.321 V5.13.0 S11.6.2.2, TS25.321 V5.13.0 S4.2.3.3, TS25.321 V5.13.0 S4.2.4.3 |
| 227 | | | | | | | |
| T | Mitsubishi | US 7349368 | | 10/12/2017 | Data rate change notification for a communication system | 3 | TR21.905 V3.3.0 S3, TS25.331 V3.16.0 S10.2.50, TS25.331 V3.16.0 S10.3.3.1, TS25.331 V3.16.0 S10.3.5.1, TS25.331 V3.16.0 S3.2 |
| T | Mitsubishi | JP 4358166 | | 10/12/2017 | Communication control apparatus, base station and mobile station | 5 | TR21.905 V3.3.0 S3, TS25.331 V3.16.0 S10.2.50, TS25.331 V3.16.0 S10.3.3.1, TS25.331 V3.16.0 S10.3.5.1, TS25.331 V3.16.0 S3.2 |
| 228 | | | | | | | |
| T | Panasonic | EP 1187417 | DE, FI, FR, GB, SE | 07/09/2020 | Method and apparatus for transmitting data packets | 1 | TS25.323 V4.6.0 S4.2, TS25.323 V4.6.0 S5.1.3 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|--|---|--|-------------------------|---|
| 229 | | | | | | | |
| T | Panasonic | EP 1330088 | AT, BE, CH, DK, ES, GR, IE, IT, LI, LU, PT, SE | 26/03/2013 | Communication System | 4 | TS25.101 V8.3.0 S7.1, TS25.211 V8.0.0 Figure 35, TS25.211 V8.0.0 S4.1.2.7, TS25.211 V8.0.0 S5.3.3.12, TS25.211 V8.0.0 S5.3.3.13, TS25.211 V8.0.0 S7.8, TS25.212 V8.0.0 Figure 16, TS25.212 V8.0.0 Figure 19, TS25.212 V8.0.0 S4.5, TS25.212 V8.0.0 S4.5.3, TS25.212 V8.0.0 S4.6.1, TS25.212 V8.0.0 S4.6.2.2, TS25.212 V8.0.0 S4.6.2.3, TS25.212 V8.0.0 S4.6.5, TS25.213 V8.0.0 S5.1.1, TS25.213 V8.0.0 Table 3A, TS25.301 V8.0.0 S5.2.2 |
| 230 | | | | | | | |
| T | Panasonic | EP 1447956 | DE, FI, FR, GB, SE | 11/09/2020 | Apparatus and method for header decompression | 4 | TS25.323 V4.6.0 S4.2, TS25.323 V4.6.0 S5.1.3, TS25.323 V5.0.0 |
| 231 | | | | | | | |
| T | Panasonic | JP 3588460 | | 27/03/2012 | A receiving apparatus and a receiving method | 1 | TS25.211 V8.0.0 S4.1.2.7, TS25.211 V8.0.0 S5.3.3.12, TS25.211 V8.0.0 S5.3.3.13, TS25.212 V8.0.0 S4.6.1, TS25.212 V8.0.0 S4.6.2.2, TS25.212 V8.0.0 S4.6.2.3, TS25.213 V8.0.0 S5.1.1, TS25.213 V8.0.0 Table 3A, TS25.301 V8.0.0 S5.2.2 |
| 232 | | | | | | | |
| T | Fujitsu | JP 3862684 | | 15/04/2014 | System for monitoring carriers of peripheral zones | 1 | TR25.990 V0.1.4 S3, TS25.211 V3.4.0 Figure 13, TS25.211 V3.4.0 Figure 14, TS25.211 V3.4.0 S5.3.3.1, TS25.211 V3.4.0 S5.3.3.1.1, TS25.213 V3.4.0 Figure 8, TS25.213 V3.4.0 Figure 9, TS25.213 V3.4.0 S5.1, TS25.304 V7.5.0 Figure 1, TS25.304 V7.5.0 S4.1, TS25.304 V7.5.0 S5.2.3.1.1, TS25.304 V7.5.0 S5.2.3.1.2, TS25.304 V7.5.0 S5.2.5.1, TS25.304 V7.5.0 S5.2.6.1.4 |
| T | Fujitsu | JP 4290712 | | 15/04/2014 | System for monitoring carriers of peripheral zones | 1 | TR25.990 V0.1.4 S3, TS25.211 V3.4.0 Figure 13, TS25.211 V3.4.0 Figure 14, TS25.211 V3.4.0 S5.3.3.1, TS25.211 V3.4.0 S5.3.3.1.1, TS25.213 V3.4.0 Figure 8, TS25.213 V3.4.0 Figure 9, TS25.213 V3.4.0 S5.1, TS25.304 V7.5.0 Figure 1, TS25.304 V7.5.0 S4.1, TS25.304 V7.5.0 S5.2.3.1.1, TS25.304 V7.5.0 S5.2.3.1.2, TS25.304 V7.5.0 S5.2.5.1, TS25.304 V7.5.0 S5.2.6.1.4 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 233 | | | | | | | |
| T | Fujitsu | JP 4037965 | | 18/08/2018 | System and method for code division multiple access communication, and base station and terminal apparatus for same system. | 3 | TR25.990 V0.1.4 S3, TS25.201 V2.1.0 Figure 5-1, TS25.201 V2.1.0 S3.3, TS25.201 V2.1.0 S4.1.1, TS25.211 V3.0.0 Figure 21, TS25.211 V3.0.0 Figure 26, TS25.211 V3.0.0 Figure 3, TS25.211 V3.0.0 Figure 4, TS25.211 V3.0.0 S4.2.4, TS25.211 V3.0.0 S5.2.2, TS25.211 V3.0.0 S5.2.2.1, TS25.211 V3.0.0 S5.2.2.1.1, TS25.211 V3.0.0 S5.2.2.1.2, TS25.211 V3.0.0 S5.3.3.6, TS25.211 V3.0.0 S7.3 |
| 234 | | | | | | | |
| T | Panasonic | EP 1204225 | DE, FR, GB | 25/06/2021 | Communication Apparatus | 1 | TS25.214 V5.11.0 S6A.1.2, TS25.214 V5.11.0 S6A.2, TS25.214 V5.11.0 Table 7A, TS25.214 V5.11.0 Table 7B, TS25.214 V5.11.0 Table 7C |
| 235 | | | | | | | |
| T | Panasonic | EP 1427128 | DE, ES, FI, FR, GB, NL, SE | 21/02/2021 | Hybrid ARQ method with signal constellation rearrangement | 12 | TS25.201 V8.1.0 S4.1.2, TS25.211 V5.8.0 S5.3.3.13, TS25.212 V5.10.0 Figure 16, TS25.212 V5.10.0 S4.5, TS25.212 V5.10.0 S4.5.7, TS25.212 V5.10.0 S4.6.2.1, TS25.212 V5.10.0 Table 11, TS25.212 V5.10.0 Table 12, TS25.213 V5.6.0 Fig.8, TS25.213 V5.6.0 S5.1, TS25.213 V5.6.0 Table 3A, TS25.301 V5.6.0 S5.3.1.2, TS25.321 V5.13.0 S11.6.1.3, TS25.321 V5.13.0 S11.6.2.1, TS25.321 V5.13.0 S11.6.2.2, TS25.321 V5.13.0 S4.2.3.3, TS25.321 V5.13.0 S4.2.4.3 |
| 236 | | | | | | | |
| BS, T | Panasonic | US 6490263 | | 20/12/2021 | Radio Communication Apparatus And Radio Communication Method | 16 | TS25.211 V5.8.0 Figure 1, TS25.211 V5.8.0 Figure 9, TS25.211 V5.8.0 S5.2.1, TS25.211 V5.8.0 S5.3.2, TS25.211 V5.8.0 S7.6.3, TS25.214 V5.11.0 B.1, TS25.214 V5.11.0 B.2, TS25.214 V5.11.0 Figure B.1, TS25.214 V5.11.0 S5.2.1.2, TS25.214 V5.11.0 S5.2.1.2.1 |
| 237 | | | | | | | |
| T | Panasonic | US 7200788 | | 30/07/2023 | Radio Reception System | 1 | TS25.211 V5.8.0 Figure 2A, TS25.211 V5.8.0 S5.2.1, TS25.211 V5.8.0 S5.3.3.12, TS25.212 V5.10.0 S4.7.1.1, TS25.212 V5.10.0 Table 13A, TS25.214 V5.11.0 S6A.1.1, TS25.308 V5.7.0 Figure 5.2.2.1-1, TS25.308 V5.7.0 S5.2.2.1 |
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|--|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 238 T | Panasonic | EP 0992981 | DE, FR, GB, IT | 06/11/2017 | Excitation Method Generator and Excitation Vector Generating Method | 1 | TS26.073 V3.3.0 S4.5.2, TS26.073 V3.3.0 Table 6, TS26.090 V3.1.0 S3.1, TS26.090 V3.1.0 S6, TS26.090 V3.1.0 S6.1 |
| 239 T | Panasonic | EP 0994462 | DE, FR, GB, IT | 06/11/2017 | Excitation vector generation | 1 | TS26.090 V3.1.0 S1, TS26.090 V3.1.0 S3.1, TS26.090 V3.1.0 S6.1 |
| 240 T | Panasonic | EP 1094447 | DE, FR, GB, IT | 06/11/2017 | Vector quantization codebook generation method | 1 | TS26.073 V3.3.0 S4.5.2, TS26.073 V3.3.0 Table 6, TS26.090 V3.1.0 S1, TS26.090 V3.1.0 S3.1, TS26.090 V3.1.0 S5.7.1, TS26.090 V3.1.0 S6.1 |
| 241 T | Panasonic | EP 1136985 | DE, FR, GB, IT | 06/11/2017 | Apparatus and method for CELP speech coding and decoding | 1 | TS26.073 V3.3.0 S4.5.2, TS26.073 V3.3.0 Table 6, TS26.090 V3.1.0 S3.1, TS26.090 V3.1.0 S4.3, TS26.090 V3.1.0 S6, TS26.090 V3.1.0 S6.1 |
| 242 T | Panasonic | EP 0967594 | DE, FR, GB, IT | 22/10/2018 | Sound encoder and sound decoder | 27 | TS26.073 V3.3.0 ph_disp.c, TS26.073 V3.3.0 S4.5.2, TS26.073 V3.3.0 Table 6, TS26.090 V3.1.0 S1, TS26.090 V3.1.0 S3.1, TS26.090 V3.1.0 S4.3, TS26.090 V3.1.0 S5.7.1, TS26.090 V3.1.0 S6.1, TS26.090 V3.1.0 Table 6 |
| 243 T | Panasonic | EP 1156617 | DE, ES, FR, GB, IT | 17/05/2020 | Hybrid ARQ method for packet data transmission | 1 | TS25.211 V6.9.0 figure 2B, TS25.211 V6.9.0 S5.2.1.3, TS25.309 V6.6.0 S4, TS25.309 V6.6.0 S8.1, TS25.309 V6.6.0 S8.2, TS25.321 V6.15.0 figure 9.1.5.1, TS25.321 V6.15.0 figure 9.1.5.2a, TS25.321 V6.15.0 figure 9.1.5.2b, TS25.321 V6.15.0 S11.8.1.1.2, TS25.321 V6.15.0 S3.2, TS25.321 V6.15.0 S4.2.3.4, TS25.321 V6.15.0 S9.1.5, TS25.321 V6.15.0 S9.2.5.1 |
| T | Panasonic | JP 3455195 | | 15/05/2021 | Hybrid ARQ method for packet data transmission | 1, 2 | TS25.211 V6.9.0 figure 2B, TS25.211 V6.9.0 S5.2.1.3, TS25.213 V6.5.0 S4.3.1.2.3, TS25.213 V6.5.0 Table 1E, TS25.309 V6.6.0 S4, TS25.309 V6.6.0 S8.1, TS25.321 V6.15.0 figure 9.1.5.1, TS25.321 V6.15.0 figure 9.1.5.2a, TS25.321 V6.15.0 figure 9.1.5.2b, TS25.321 V6.15.0 S11.8.1.1.2, TS25.321 V6.15.0 S4.2.3.4, TS25.321 V6.15.0 S9.1.5, TS25.321 V6.15.0 S9.2.5.1 |

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|--|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 244 BS, T | Panasonic | JP 3286247 | JP | 08/05/2018 | A radio communication system | 1 | TS25.201 V5.3.0 S4.2.1, TS25.201 V5.3.0 S4.2.4, TS25.211 V5.8.0 Figure 1, TS25.211 V5.8.0 Figure 9, TS25.211 V5.8.0 S5.2.1, TS25.211 V5.8.0 S5.3.2, TS25.211 V5.8.0 S7.6.3, TS25.211 V5.8.0 Table 11, TS25.214 V5.11.0 B.1, TS25.214 V5.11.0 Figure B.1, TS25.214 V5.11.0 S5.2.1.2.1, TS25.214 V5.11.0 S5.2.1.2.2 |
| 245 T | Panasonic | JP 3426194 | | 31/07/2020 | Communication terminal apparatus | 1 | TS25.214 V5.11.0 S6A.1.2, TS25.214 V5.11.0 S6A.2, TS25.214 V5.11.0 Table 7A, TS25.214 V5.11.0 Table 7B, TS25.214 V5.11.0 Table 7C |
| 246 T | Panasonic | JP 3594185 | | 17/08/2024 | Data transmission device and data transmission method | 6 | TS26.234 V6.13.0 S2, TS26.234 V6.13.0 S6.2.3.3.1 |
| 247 T | Panasonic | JP 3594195 | | 17/08/2024 | Data transmission device and data transmission method | 2 | TS26.234 V6.13.0 S2, TS26.234 V6.13.0 S6.2.3.3.1 |
| 248 T | Panasonic | JP 3821823 | | 22/10/2024 | Radio base station apparatus and transmission rate notifying method | 3, 11 | TS25.212 V6.10.0 S4.9, TS25.212 V6.10.0 S4.9.2.1, TS25.302 V6.8.0 S7.1.15, TS25.302 V6.8.0 S7.1.3, TS25.321 V6.15.0 Annex B, TS25.321 V6.15.0 Annex B.1, TS25.321 V6.15.0 Annex B.3, TS25.321 V6.15.0 Figure 4.2.3.4.1, TS25.321 V6.15.0 S4.2.3.4, TS25.321 V6.15.0 S9.2.5.4 |
| 249 T | Panasonic | JP 3913259 | | 15/05/2021 | Hybrid ARQ method for packet data transmission | 20, 26 | TS25.211 V5.8.0 S5.3.3.12, TS25.211 V5.8.0 S5.3.3.13, TS25.212 V5.10.0 S4.6, TS25.212 V5.10.0 S4.6.2.5, TS25.213 V5.6.0 S5.2.1, TS25.214 V5.11.0 S5.2.10, TS25.214 V5.11.0 S5.2.11, TS25.308 V5.7.0 S5.2.2.1, TS25.308 V5.7.0 S6.1, TS25.308 V5.7.0 S6.1.4, TS25.321 V5.13.0 Figure 9.1.4.1, TS25.321 V5.13.0 S11.6.2.1, TS25.321 V5.13.0 S11.6.2.2, TS25.321 V5.13.0 S9.1.4 |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|--|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 250 CN, T | Mitsubishi | JP 4087823 | JP | 28/10/2014 | Wideband speech reconstruction method and wideband speech | 1, 2 | TS26.190 V6.1.1 S3.2, TS26.190 V6.1.1 S4.3, TS26.190 V6.1.1 S4.4, TS26.190 V6.1.1 S6.1, TS26.190 V6.1.1 S6.2, TS26.190 V6.1.1 S6.3.2.2, TS26.190 V6.1.1 S6.3.3 Fig. 3 |
| 251 T | Mitsubishi | JP 4098271 | JP | 28/03/2021 | A noise reduction method and a noise reduction device | 1 | TS26.243 V6.1.0 File main.c, TS26.243 V6.1.0 S2 |
| 252 BS, T | Panasonic | JP 3008651 | JP | 27/03/2012 | A transmission apparatus, a transmission method, a receiving apparatus and a receiving method | 4, 5 | TS25.104 V6.9.0 S4.2, TS25.211 V8.0.0 Figure 35, TS25.211 V8.0.0 S4.1.2.7, TS25.211 V8.0.0 S5.3.3.12, TS25.211 V8.0.0 S5.3.3.13, TS25.211 V8.0.0 S7.8, TS25.212 V8.0.0 S4.6.1, TS25.212 V8.0.0 S4.6.2.2, TS25.212 V8.0.0 S4.6.2.3, TS25.212 V8.0.0 S4.6A.2.1, TS25.213 V5.6.0 Fig.8, TS25.213 V5.6.0 Figure 9, TS25.213 V5.6.0 S5.1, TS25.213 V8.0.0 S5.1.1, TS25.213 V8.0.0 Table 3A, TS25.301 V8.0.0 S5.2.2 |
| 253 BS, T | Panasonic | JP 2863975 | JP | 16/07/2013 | A CDMA transmission apparatus, a CDMA reception apparatus, a CDMA transmission method and a CDMA mobile communication system | 1, 3, 4 | TS25.101 V3.19.0 S5.2, TS25.201 V3.4.0 Figure 1, TS25.201 V3.4.0 S4.1.1, TS25.201 V3.4.0 S4.1.2, TS25.201 V3.4.0 S4.2.1, TS25.201 V3.4.0 S4.2.3, TS25.211 V3.12.0 S5.3.3.1.2, TS25.213 V3.9.0 Figure 10, TS25.213 V3.9.0 Figure 8, TS25.213 V3.9.0 Figure 9, TS25.213 V3.9.0 S5.1, TS25.213 V3.9.0 S5.2.1, TS25.213 V3.9.0 S5.2.2 |
| 254 T | Fujitsu | JP 3966422 | JP | 18/05/2012 | A receiving circuit and method used in mobile communication system accommodated with a spectrum spreading communication method | 1 | TR25.990 V0.1.4 S3, TR25.990 V0.1.4 S4, TS25.211 V5.8.0 Figure 26A, TS25.211 V5.8.0 Figure 26B, TS25.211 V5.8.0 Figure 35, TS25.211 V5.8.0 S5.3.3.12, TS25.211 V5.8.0 S5.3.3.13, TS25.211 V5.8.0 S7.8, TS25.211 V5.8.0 Table 26, TS25.331 V5.18.0 S10.3.6.36a |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

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|---|--------------------------------|----------------------|---|---|---|-------------------------|---|
| 255 | | | | | | | |
| T | Fujitsu | JP 4057628 | JP | 24/06/2016 | Mobile communication system enabling efficient use of small- zone base stations | 1 | TR21.905 V3.3.0 S3, TR25.990 V0.1.4 S3, TS25.304 V3.14.0 S3.2, TS25.304 V3.14.0 S5.2.1, TS25.304 V3.14.0 S5.2.6.1.3, TS25.304 V3.14.0 S5.2.6.1.4, TS25.304 V3.14.0 S5.2.6.1.5, TS25.331 V3.14.0 Figure 8.1.1-1, TS25.331 V3.14.0 S10.2.48.8.6, TS25.331 V3.14.0 S10.3.2.3, TS25.331 V3.14.0 S10.3.2.4, TS25.331 V3.14.0 S10.3.7.11, TS25.331 V3.14.0 S10.3.7.12, TS25.331 V3.14.0 S3.2, TS25.331 V3.14.0 S8.1.1, TS25.331 V3.14.0 S8.1.1.1.1, TS25.331 V3.14.0 S8.1.1.1.2, TS25.331 V3.14.0 Table 8.1.1 |
| T | Fujitsu | JP 4057627 | | 24/06/2016 | Mobile communication system enabling efficient use of small-zone base stations | 1 | TS25.304 V3.14.0 S1, TS25.304 V3.14.0 S3.2, TS25.304 V3.14.0 S5.2.6.1.2, TS25.304 V3.14.0 S5.2.6.1.4, TS25.304 V3.14.0 S5.2.6.1.5, TS25.331 V3.14.0 Figure 8.1.1-1, TS25.331 V3.14.0 S10.2.48.8.14, TS25.331 V3.14.0 S10.3.7.13, TS25.331 V3.14.0 S10.3.7.20, TS25.331 V3.14.0 S10.3.7.47, TS25.331 V3.14.0 S3.2, TS25.331 V3.14.0 S8.1.1, TS25.331 V3.14.0 S8.1.1.2 |
| 256 | | | | | | | |
| T | Panasonic | JP 3643832 | | 26/03/2013 | A base station, a mobile terminal and a transmission and a receiving method. | 5 | TS25.201 V8.0.0 S4.2.3, TS25.211 V8.0.0 S4.1.2.7, TS25.211 V8.0.0 S5.2.1, TS25.211 V8.0.0 S5.3.3.12, TS25.211 V8.0.0 S5.3.3.13, TS25.212 V8.0.0 S4.6.1, TS25.212 V8.0.0 S4.6.2.2, TS25.212 V8.0.0 S4.6.2.3, TS25.213 V8.0.0 Figure 1A, TS25.213 V8.0.0 S4.2.1, TS25.213 V8.0.0 S5.1.1, TS25.213 V8.0.0 Table 3A, TS25.301 V8.0.0 S5.2.2 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|---|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 257 | | | | | | | |
| T | Siemens | US 7360141 | | 07/01/2024 | Method and device for transmitting data according to a hybrid ARQ method | 1, 17 | TS25.212 V6.3.0 Figure 21, TS25.212 V6.3.0 Figure 22, TS25.212 V6.3.0 S4.5.4, TS25.212 V6.3.0 S4.5.4.3, TS25.212 V6.3.0 S4.8, TS25.212 V6.3.0 S4.8.4, TS25.212 V6.3.0 S4.8.4.3, TS25.212 V6.3.0 S4.9.2.2, TS25.212 V6.3.0 Table 10, TS25.212 V6.3.0 Table 15, TS25.212 V6.3.0 Table 16, TS25.309 V6.4.0 S4, TS25.309 V6.4.0 S7.2.5, TS25.309 V6.4.0 S8, TS25.309 V6.4.0 S8.1 |
| T | Siemens | EP 1362448 | DE, FR, GB | 19/02/2021 | Method and device for transmitting data according to a hybrid ARQ method. | 1, 13 | TS25.212 V6.3.0 Figure 22, TS25.212 V6.3.0 S4.5.4.3, TS25.212 V6.3.0 S4.8.4, TS25.212 V6.3.0 S4.8.4.3, TS25.212 V6.3.0 S4.9.2.2, TS25.212 V6.3.0 Table 10, TS25.212 V6.3.0 Table 15, TS25.212 V6.3.0 Table 16, TS25.309 V6.4.0 S4, TS25.309 V6.4.0 S7.2.5, TS25.309 V6.4.0 S8, TS25.309 V6.4.0 S8.1 |
| 258 | | | | | | | |
| CN, T | KPN | US 5930250 | | 04/09/2016 | Communication system for interactive services with a packet switching interaction channel over a narrow-band circuit switching network, as well as a device for application in such a communication system. | 1 | TS23.140 V4.10.0 B.1.2, TS23.140 V4.10.0 B.1.3, TS23.140 V4.10.0 Fig 5, TS23.140 V4.10.0 Fig 6, TS23.140 V4.10.0 Fig B.2, TS23.140 V4.10.0 Figure B.3, TS23.140 V4.10.0 S3.1, TS23.140 V4.10.0 S6.1.2, TS23.140 V4.10.0 S6.1.2.1, TS23.140 V4.10.0 S6.1.3, TS23.140 V4.10.0 S7.2, TS23.140 V4.10.0 S7.7, TS23.140 V4.10.0 S8, TS23.140 V4.10.0 S8.1.2.1, TS23.140 V4.10.0 S8.1.3.1, TS23.140 V4.10.0 S8.1.3.4, TS23.140 V4.10.0 Table 8 |
| 259 | | | | | | | |
| BS, T | Panasonic | JP 3114727 | | 27/03/2012 | A transmitter, a receiver, a transmission method, and a receiving method. | 6, 9 | TS25.104 V6.9.0 S4.2, TS25.211 V8.0.0 Figure 35, TS25.211 V8.0.0 S4.1.2.7, TS25.211 V8.0.0 S5.3.3.12, TS25.211 V8.0.0 S5.3.3.13, TS25.211 V8.0.0 S7.8, TS25.212 V8.0.0 S4.5.3, TS25.212 V8.0.0 S4.6.1, TS25.212 V8.0.0 S4.6.2.2, TS25.212 V8.0.0 S4.6.2.3, TS25.212 V8.0.0 S4.6.5, TS25.212 V8.0.0 S4.6A.2.1, TS25.213 V5.5.0 Figure 8, TS25.213 V5.5.0 Figure 9, TS25.213 V5.5.0 S5.1, TS25.213 V8.0.0 S5.1.1, TS25.213 V8.0.0 Table 3A, TS25.301 V8.0.0 S5.2.2 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 260 | | | | | | | |
| BS, T | NTT DoCoMo | EP 1494372 | DE, FR, GB, IT, SE | 17/04/2018 | Base station apparatus of mobile communication system. | 1, 3 | TS25.201 V3.4.0 Figure 1, TS25.201 V3.4.0 S4.1.1, TS25.201 V3.4.0 S4.2.1, TS25.211 V3.12.0 Fig. 1, TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3.2, TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 S4.1, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.1, TS25.212 V3.11.0 S4.2.1.1, TS25.212 V3.11.0 S4.2.1.2, TS25.212 V3.11.0 S4.2.12, TS25.212 V3.11.0 S4.2.6, TS25.301 V3.11.0 Fig. 4, TS25.301 V3.11.0 Fig. 5, TS25.301 V3.11.0 S5.3.1.1.2, TS25.301 V3.11.0 S5.3.1.1.2.2, TS25.302 V3.16.0 Figure 6, TS25.302 V3.16.0 S7.1.1, TS25.302 V3.16.0 S7.1.5, TS34.108 V3.15.0 S6.10.2.4.1.1.1.1.1, TS34.108 V3.15.0 S6.10.2.4.1.1.2.1.1, TS34.108 V3.15.0 S6.10.2.4.1.2.1.1.1, TS34.108 V3.15.0 S6.10.2.4.1.2.2.1.1, TS34.108 V3.15.0 S6.10.2.4.1.3.1.1.1, TS34.108 V3.15.0 S6.10.2.4.1.3.2.1.1 |
| BS, T | NTT DoCoMo | US 7443907 | | 17/04/2018 | Base Station Apparatus of Mobile Communication System | 1, 2 | TS25.201 V3.4.0 Figure 1, TS25.201 V3.4.0 S4.1.1, TS25.201 V3.4.0 S4.2.1, TS25.201 V3.4.0 S4.2.3, TS25.211 V3.12.0 Fig. 1, TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 S5.1, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3.2, TS25.211 V3.12.0 Table 1, TS25.211 V3.12.0 Table 11, TS25.211 V3.12.0 Table 2, TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 Fig. 2, TS25.212 V3.11.0 S4.1, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.1, TS25.212 V3.11.0 S4.2.1.1, TS25.212 V3.11.0 S4.2.1.2, TS25.212 V3.11.0 S4.2.12, TS25.212 V3.11.0 S4.2.6, TS25.213 V3.9.0 Figure 1, TS25.213 V3.9.0 Figure 8, TS25.213 V3.9.0 S4.2.1, TS25.213 V3.9.0 S5.1, TS25.301 V3.11.0 Fig. 4, TS25.301 V3.11.0 Fig. 5, TS25.301 V3.11.0 S5.3.1.1.2.2, TS25.302 V3.16.0 Figure 6, TS25.302 V3.16.0 S7.1.1, TS25.302 V3.16.0 S7.1.5, TS34.108 V3.15.0 S6.10.2.4.1.1.1.1.1, TS34.108 V3.15.0 S6.10.2.4.1.1.2.1.1, TS34.108 V3.15.0 S6.10.2.4.1.2.1.1.1, TS34.108 V3.15.0 S6.10.2.4.1.2.2.1.1, TS34.108 V3.15.0 S6.10.2.4.1.3.1.1.1, TS34.108 V3.15.0 S6.10.2.4.1.3.2.1.1 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|--|--------------------------------|----------------------|---|---|---|-------------------------|--|
| BS, T | NTT DoCoMo | CN 200310101333 | | 17/04/2018 | Base station apparatus of mobile communication system. | 1 | TS25.201 V3.4.0 Figure 1, TS25.201 V3.4.0 S4.1.1, TS25.211 V3.12.0 Fig. 1, TS25.211 V3.12.0 Figure 9, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3.2, TS25.212 V3.11.0 Fig. 1, TS25.212 V3.11.0 Figure 2, TS25.212 V3.11.0 S4.1, TS25.212 V3.11.0 S4.2, TS25.212 V3.11.0 S4.2.12, TS25.301 V3.11.0 Fig. 4, TS25.301 V3.11.0 Fig. 5, TS25.301 V3.11.0 S5.3.1.1.2, TS25.302 V3.16.0 Figure 6, TS25.302 V3.16.0 S7.1.1, TS25.302 V3.16.0 S7.1.5, TS34.108 V3.15.0 S6.10.2.4.1.1.1.1.1, TS34.108 V3.15.0 S6.10.2.4.1.1.2.1.1, TS34.108 V3.15.0 S6.10.2.4.1.2.1.1.1, TS34.108 V3.15.0 S6.10.2.4.1.2.2.1.1, TS34.108 V3.15.0 S6.10.2.4.1.3.1.1.1, TS34.108 V3.15.0 S6.10.2.4.1.3.2.1.1 |
| 261 | | | | | | | |
| T | Siemens | EP 1388222 | DE, FR, GB | 14/05/2021 | Closed-loop antenna diversity in a cellular radio communication system. | 1, 3 | TS25.211 V4.2.0 Figure 1, TS25.211 V4.2.0 Figure 2, TS25.211 V4.2.0 S1, TS25.211 V4.2.0 S2, TS25.211 V4.2.0 S5.2.1, TS25.211 V4.2.0 S5.3.1, TS25.211 V4.2.0 S5.3.1.1, TS25.211 V4.2.0 S5.3.1.2, TS25.211 V4.2.0 S5.3.3.1, TS25.214 V4.2.0 Figure 3, TS25.214 V4.2.0 S1, TS25.214 V4.2.0 S2, TS25.214 V4.2.0 S7, TS25.214 V4.2.0 S7.1, TS25.214 V4.2.0 S7.2, TS25.214 V4.2.0 S7.2.2, TS25.214 V4.2.0 S7.2.4 |
| 262 | | | | | | | |
| BS, T | Siemens | US 7289769 | | 18/03/2023 | Closed-loop antenna diversity in a cellular radio communication system. | 1, 16 | TS25.211 V4.2.0 Figure 1, TS25.211 V4.2.0 Figure 2, TS25.211 V4.2.0 S1, TS25.211 V4.2.0 S2, TS25.211 V4.2.0 S5.2.1, TS25.211 V4.2.0 S5.3.1.2, TS25.211 V4.2.0 S5.3.3.1, TS25.214 V4.2.0 Figure 3, TS25.214 V4.2.0 S1, TS25.214 V4.2.0 S2, TS25.214 V4.2.0 S7, TS25.214 V4.2.0 S7.1, TS25.214 V4.2.0 S7.2, TS25.214 V4.2.0 S7.2.2, TS25.214 V4.2.0 S7.2.3.2, TS25.214 V4.2.0 S7.2.4 |
| 263 | | | | | | | |
| BS | Siemens | EP 1436933 | DE, ES, FR, GB, IT | 02/10/2022 | Transmission method. | 1, 10 | TS25.212 V5.1.0 Figure 16, TS25.212 V5.1.0 Figure 17, TS25.212 V5.1.0 S4.2.3, TS25.212 V5.1.0 S4.2.7, TS25.212 V5.1.0 S4.5, TS25.212 V5.1.0 S4.5.4, TS25.212 V5.1.0 S4.5.4.4, TS25.213 V5.0.0 Figure 8, TS25.213 V5.0.0 Figure 9, TS25.213 V5.0.0 S5.1, TS25.213 V5.0.0 Table 4 |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

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|--|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 264 CN, T | Mitsubishi | US 7363220 | | 25/03/2019 | Method for speech coding, method for speech decoding and their apparatuses | 1 | TS26.090 V6.0.0 Fig 2, TS26.090 V6.0.0 Fig 4, TS26.090 V6.0.0 S4.3, TS26.090 V6.0.0 S4.4, TS26.090 V6.0.0 S5.7.1, TS26.090 V6.0.0 S6.1, TS26.090 V6.0.0 Table 5, TS26.090 V6.0.0 Table 6, TS26.090 V6.0.0 Table 7, TS26.090 V6.0.0 Table 8 |
| 265 CN, T | Mitsubishi | US 7383177 | | 07/12/2018 | Method for speech coding, method for speech decoding and their apparatuses. | 1 | TS26.090 V6.0.0 Fig 4, TS26.090 V6.0.0 S3.1, TS26.090 V6.0.0 S4.3, TS26.090 V6.0.0 S4.4, TS26.090 V6.0.0 S6.1 |
| 266 BS, T | Siemens | EP 1119935 | DE, ES, FR, GB, IT | 01/10/2019 | Method for adapting data rates. | 1, 7 | TS25.212 V4.0.0 Figure 1, TS25.212 V4.0.0 Figure 2, TS25.212 V4.0.0 S4.2, TS25.212 V4.0.0 S4.2.7, TS25.212 V4.0.0 S4.2.8, TS25.302 V4.0.0 S5.1, TS25.302 V4.0.0 S7.1, TS25.302 V4.0.0 S7.1.12, TS25.302 V4.0.0 S7.1.7 |
| BS, T | Siemens | JP 3505150 | | 01/10/2019 | Method for adapting data rates | 1 | TS25.212 V4.0.0 Figure 1, TS25.212 V4.0.0 Figure 2, TS25.212 V4.0.0 S4.2, TS25.212 V4.0.0 S4.2.7, TS25.212 V4.0.0 S4.2.8, TS25.302 V4.0.0 S5.1, TS25.302 V4.0.0 S7.1, TS25.302 V4.0.0 S7.1.12, TS25.302 V4.0.0 S7.1.7, TS25.302 V4.0.0 S8 |
| 267 T | Panasonic | EP 1081910 | DE, FI, FR, GB, SE | 06/08/2019 | Data transmission and reception apparatus | 1 | TS25.323 V4.6.0 A.2.8, TS25.323 V4.6.0 S2, TS25.323 V4.6.0 S2.1, TS25.323 V4.6.0 S3.4, TS25.323 V4.6.0 S4.3.1, TS25.323 V4.6.0 S4.3.1.1, TS25.323 V4.6.0 S4.3.1.2, TS25.323 V4.6.0 S4.3.1.3, TS25.323 V4.6.0 S5.3.1.1.2, TS25.323 V4.6.0 S5.3.2.2, TS25.323 V4.6.0 S5.3.2.2.2 |
| 268 T | Panasonic | EP 1411699 | DE, FI, FR, GB, SE | 06/08/2019 | Data transmission method, data transmission apparatus, and data reception apparatus. | 1 | TS25.323 V4.6.0 S2, TS25.323 V4.6.0 S4.1, TS25.323 V4.6.0 S4.3.1, TS25.323 V4.6.0 S4.3.1.1, TS25.323 V4.6.0 S4.3.1.2, TS25.323 V4.6.0 S4.3.1.3, TS25.323 V4.6.0 S5.2.1, TS25.323 V4.6.0 S5.4.1, TS25.323 V4.6.0 S5.4.1.1.1 |

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|--|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 269 T | Panasonic | EP 1411700 | DE, FI, FR, GB, SE | 06/08/2019 | Data transmission method, data transmission apparatus, and data reception apparatus. | 1 | TS25.323 V4.6.0 S2, TS25.323 V4.6.0 S4.1, TS25.323 V4.6.0 S4.3.1, TS25.323 V4.6.0 S4.3.1.1, TS25.323 V4.6.0 S4.3.1.2, TS25.323 V4.6.0 S4.3.1.3, TS25.323 V4.6.0 S5.2.7, TS25.323 V4.6.0 S5.5.1.2, TS25.323 V4.6.0 S5.7.1 |
| 270 T | Sharp | EP 1513269 | DE, ES, FR, GB, IT | 31/08/2012 | A method for improving performances of a mobile radiocommunication system using a power control algorithm. * Expiry date of right to license: 31 August 2012 | 1, 2, 4 | TS25.212 V6.6.0 S4.4.3.2, TS25.214 V6.7.0 S5.2.1.3, TS25.331 V6.6.0 S10.3.6.33, TS25.331 V6.6.0 S14.9.1, TS25.331 V6.6.0 S14.9.2, TS25.331 V6.6.0 S8.1.1.1, TS25.401 V6.7.0 S7.2.4.8, TS25.401 V6.7.0 S7.2.4.8.2, TS25.401 V6.7.0 S7.2.4.8.4 |
| 271 T | Panasonic | EP 1217861 | DE, FR, GB | 02/08/2021 | Communication terminal, Base station device, and Radio communication method. | 1 | TS25.211 V5.8.0 Figure 2A, TS25.211 V5.8.0 S5.2.1, TS25.212 V5.10.0 Figure 20, TS25.212 V5.10.0 S4.7, TS25.212 V5.10.0 S4.7.1.2, TS25.212 V5.10.0 Table 14, TS25.214 V5.11.0 S6A.1.2, TS25.214 V5.11.0 S6A.2, TS25.214 V5.11.0 Table 7A, TS25.301 V5.6.0 S5.2, TS25.301 V5.6.0 S5.2.1.1, TS25.308 V5.7.0 S6.1, TS25.308 V5.7.0 S6.1.1, TS25.321 V5.13.0 Figure 4.2.3.1, TS25.321 V5.13.0 S4.2.3 |
| 272 BS, T | Panasonic | JP 3746278 | | 15/05/2021 | Hybrid ARQ method for packet data transmission. | 4, 7, 9, 11 | TS25.101 V5.20.0 S5.2, TS25.101 V5.20.0 Table 5, TS25.212 V5.10.0 S4.6, TS25.212 V5.10.0 S4.6.2.3, TS25.213 V5.6.0 S5.2.1, TS25.301 V5.6.0 S5.3.1.2, TS25.308 V5.7.0 S5.2.2.1, TS25.308 V5.7.0 S7.1.2.1, TS25.321 V5.13.0 Figure 9.1.4.1, TS25.321 V5.13.0 S11.6.1, TS25.321 V5.13.0 S11.6.1.2, TS25.321 V5.13.0 S11.6.2.1, TS25.321 V5.13.0 S11.6.2.2, TS25.321 V5.13.0 S4.2.3.3, TS25.321 V5.13.0 S4.2.4, TS25.321 V5.13.0 S4.2.4.3, TS25.321 V5.13.0 S9.1.4 |

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|--|--------------------------------|----------------------|--|---|---|-------------------------|--|
| 273 T | Panasonic | JP 3836810 | | 21/02/2021 | Data transmission apparatus. | 6, 20 | TS25.211 V5.8.0 S5.3.3.13, TS25.212 V5.10.0 Figure 16, TS25.212 V5.10.0 S4.5, TS25.212 V5.10.0 S4.5.7, TS25.212 V5.10.0 S4.6.2.1, TS25.212 V5.10.0 Table 11, TS25.213 V5.6.0 Fig.8, TS25.213 V5.6.0 S5.1, TS25.301 V5.6.0 S5.3.1.2, TS25.321 V5.13.0 Figure 4.2.3.1, TS25.321 V5.13.0 S11.6.2.1, TS25.321 V5.13.0 S4.2.3 |
| 274 BS, T | Panasonic | JP 3843264 | | 27/12/2020 | Data transmission apparatus | 8, 10 | TS25.101 V5.20.0 S5.2, TS25.101 V5.20.0 S9.2.1.2, TS25.101 V5.20.0 Table 5, TS25.101 V5.20.0 Table 9.4, TS25.201 V5.3.0 S4.1.2, TS25.212 V5.10.0 S4.5, TS25.212 V5.10.0 S4.5.7, TS25.212 V5.10.0 S4.6.2.1, TS25.212 V5.10.0 Table 11, TS25.212 V5.10.0 Table 12, TS25.213 V5.6.0 Fig.8, TS25.213 V5.6.0 S5.1, TS25.213 V5.6.0 Table 3A, TS25.308 V5.7.0 S4, TS25.308 V5.7.0 S7, TS25.321 V5.13.0 S11.6.2.1, TS25.321 V5.13.0 S4.2.4, TS25.321 V5.13.0 S4.2.4.3 |
| 275 BS, T | Panasonic | EP 1028541 | DE, FI, FR, GB, SE | 14/03/2017 | CDMA cellular radio transmission system. | 5 | TS25.101 V3.19.0 S5.2, TS25.201 V3.4.0 S4.2.1, TS25.211 V3.12.0 Fig. 13, TS25.211 V3.12.0 Fig. 9, TS25.211 V3.12.0 Figure 27, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3.2, TS25.211 V3.12.0 S5.3.3.1, TS25.211 V3.12.0 S6.1, TS25.213 V3.9.0 Figure 11, TS25.213 V3.9.0 Figure 8, TS25.213 V3.9.0 Figure 9, TS25.213 V3.9.0 S5.1, TS25.213 V3.9.0 S5.3.2, TS25.301 V3.11.0 S5.2.2 |
| 276 T | Panasonic | EP 1608194 | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LI, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR | 15/06/2024 | Priority handling for data transmissions. | 1 | TS25.211 V6.9.0 figure 2B, TS25.211 V6.9.0 S4.1.1, TS25.211 V6.9.0 S4.1.1.2, TS25.211 V6.9.0 S5.2.1.3, TS25.309 V6.6.0 S6.1, TS25.309 V6.6.0 S7.1.1, TS25.321 V6.15.0 S11.8.1.4, TS25.331 V6.18.1 Figure 8.2.2-1, TS25.331 V6.18.1 S10.2.33, TS25.331 V6.18.1 S10.2.34, TS25.331 V6.18.1 S10.3.4.21, TS25.331 V6.18.1 S8.2.1, TS25.331 V6.18.1 S8.2.2, TS25.331 V6.18.1 S8.2.2.1, TS25.331 V6.18.1 S8.2.2.2, TS25.331 V6.18.1 S8.5.21 |

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|--|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 277 T | Panasonic | JP 3150312 | | 15/03/2016 | A CDMA cellular radio base station apparatus, a mobile terminal, a transmission method and a reception method. | 5, 9 | TS25.101 V3.19.0 S5.2, TS25.133 V3.22.0 S8.1.2.1, TS25.133 V3.22.0 S8.1.2.2.2, TS25.133 V3.22.0 S8.1.2.3.2, TS25.201 V3.4.0 S4.2.1, TS25.211 V3.12.0 Fig. 13, TS25.211 V3.12.0 S5.2.1, TS25.211 V3.12.0 S5.3.2, TS25.211 V3.12.0 S5.3.3.1, TS25.215 V3.13.0 S5.1, TS25.215 V3.13.0 S5.1.1, TS25.215 V3.13.0 S6.1.1.1 |
| 278 T | Panasonic | JP 4012240 | | 31/03/2026 | A method for setting a happy bit in a mobile communication system. | 1, 8 | TS25.211 V6.9.0 S5.2.1, TS25.211 V6.9.0 S5.2.1.3, TS25.309 V6.6.0 S9.1, TS25.309 V6.6.0 S9.3.1, TS25.309 V6.6.0 S9.3.1.2, TS25.321 V6.16.0 S11.8.1.5, TS25.321 V6.16.0 S9.2.5.3, TS25.321 V6.16.0 S9.2.5.3.1 |
| 279 BS, CN, T | Siemens | JP 3943546 | | 19/10/2021 | Multicast method for providing broadcasting services with transmission of multicast and/or broadcasting data via communication node using service specific context stored at latter. | 1, 2, 3 | TS23.246 V7.1.1 Figure 1, TS23.246 V7.1.1 Figure 2, TS23.246 V7.1.1 Figure 4, TS23.246 V7.1.1 Figure 5a, TS23.246 V7.1.1 Figure 7, TS23.246 V7.1.1 Figure 9, TS23.246 V7.1.1 S4.1, TS23.246 V7.1.1 S4.2, TS23.246 V7.1.1 S4.4.1, TS23.246 V7.1.1 S4.4.1.3, TS23.246 V7.1.1 S4.4.1.6, TS23.246 V7.1.1 S4.4.3, TS23.246 V7.1.1 S4.4.3.1a, TS23.246 V7.1.1 S4.4.3.4, TS23.246 V7.1.1 S5.1, TS23.246 V7.1.1 S5.1.2, TS23.246 V7.1.1 S5.3, TS23.246 V7.1.1 S5.4, TS23.246 V7.1.1 S6.1, TS23.246 V7.1.1 S8.2, TS23.246 V7.1.1 S8.4, TS23.246 V7.1.1 Table 1 |
| 280 T | Panasonic | EP 1085504 | DE, FR, GB, IT | 06/11/2017 | CELP Codec | 1 | TS26.090 V3.1.0 Figure 2, TS26.090 V3.1.0 S3.1, TS26.090 V3.1.0 S3.2, TS26.090 V3.1.0 S4.3, TS26.090 V3.1.0 S5.7.1, TS26.090 V3.1.0 S6, TS26.090 V3.1.0 S6.1, TS26.090 V3.1.0 Table 3 |
| 281 T | Panasonic | EP 1684268 | DE, FR, GB, IT | 22/10/2018 | Method and apparatus for the generation of vectors for speech decoding. | 1 | TS26.090 V3.1.0 S3.1, TS26.090 V3.1.0 S3.2, TS26.090 V3.1.0 S5.7.1, TS26.090 V3.1.0 S6.1, TS26.090 V3.1.0 Table 6 |

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|--|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 282 T | Panasonic | EP 1746583 | DE, FR, GB, IT | 22/10/2018 | Sound encoder and sound decoder. | 1 | TS26.073 V3.3.0 ph_disp.c, TS26.073 V3.3.0 S4.1, TS26.073 V3.3.0 S4.5.2, TS26.073 V3.3.0 Table 6, TS26.090 V3.1.0 Figure 2, TS26.090 V3.1.0 S3.1, TS26.090 V3.1.0 S4.3, TS26.090 V3.1.0 S5.7.1, TS26.090 V3.1.0 S6, TS26.090 V3.1.0 S6.1, TS26.090 V3.1.0 S6.1.5, TS26.090 V3.1.0 S6.1.6, TS26.090 V3.1.0 Table 6 |
| 283 T | Panasonic | JP 3236850 | | 19/02/2017 | An excitation vector generator and an excitation vector generating method. | 1 | TS26.073 V3.3.0 ph_disp.c, TS26.073 V3.3.0 S4.1, TS26.073 V3.3.0 S4.5.2, TS26.073 V3.3.0 Table 6, TS26.090 V3.1.0 S3.1, TS26.090 V3.1.0 S5.7.1, TS26.090 V3.1.0 S6.1, TS26.090 V3.1.0 Table 6 |
| 284 BS, T | Panasonic | JP 3061053 | | 27/03/2012 | A transmitter, a receiver, a transmission method, and a receiving method. | 6, 7 | TS25.104 V6.9.0 S4.2, TS25.104 V6.9.0 S5.2, TS25.104 V6.9.0 Table 5, TS25.211 V8.0.0 Figure 27, TS25.211 V8.0.0 Figure 35, TS25.211 V8.0.0 S4.1.2.7, TS25.211 V8.0.0 S5.3.3.12, TS25.211 V8.0.0 S5.3.3.13, TS25.211 V8.0.0 S6.1, TS25.211 V8.0.0 S7.8, TS25.212 V8.0.0 S4.6.2.2, TS25.212 V8.0.0 S4.6.2.3, TS25.212 V8.0.0 S4.6A.2.1, TS25.212 V8.1.0 S4.6.1, TS25.213 V5.6.0 Fig.8, TS25.213 V5.6.0 Figure 9, TS25.213 V5.6.0 S5.1, TS25.213 V8.0.0 S5.1.1, TS25.213 V8.0.0 S5.1.1.2, TS25.213 V8.0.0 Table 3A, TS25.213 V8.0.0 Table 3B, TS25.301 V8.0.0 S5.2.2 |
| 285 T | Mitsubishi | JP 4173525 | | 28/03/2021 | A noise reduction method and a noise reduction device. | 3 | TS26.243 V6.1.0 Fig. 4.1, TS26.243 V6.1.0 Fig. 5.1, TS26.243 V6.1.0 Fig. 5.2, TS26.243 V6.1.0 S2, TS26.243 V6.1.0 S3.2, TS26.243 V6.1.0 S4, TS26.243 V6.1.0 S5.1.1, TS26.243 V6.1.0 S5.1.10, TS26.243 V6.1.0 S5.1.3, TS26.243 V6.1.0 S5.1.4, TS26.243 V6.1.0 S5.1.5, TS26.243 V6.1.0 S5.1.7, TS26.243 V6.1.0 S5.1.9 |

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|--|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 286 T | Mitsubishi | EP 1830476 | DE, FR, GB | 05/03/2019 | Spread spectrum communication device. | 1 | TS25.201 V8.1.0 S4.1.1, TS25.211 V5.4.0 S5.2.1, TS25.211 V5.4.0 Table 2, TS25.212 V5.3.0 Fig. 11, TS25.212 V5.3.0 S1, TS25.212 V5.3.0 S3.1, TS25.212 V5.3.0 S4.2, TS25.212 V5.3.0 S4.4, TS25.212 V5.3.0 S4.4.3, TS25.214 V5.4.0 S5.1.2.2.1, TS25.214 V5.4.0 S5.1.2.2.2.1, TS25.214 V5.4.0 S5.1.2.3, TS25.214 V5.4.0 Table 2, TS25.215 V5.6.0 S6.1.1.1, TS25.215 V5.6.0 S6.1.1.2 |
| 287 T | Panasonic | JP 3869839 | | 27/03/2012 | A transmitter, a receiver, a transmission method, and a receiving method. | 5 | TS25.211 V8.0.0 Figure 27, TS25.211 V8.0.0 S5.3.3.12, TS25.211 V8.0.0 S5.3.3.13, TS25.211 V8.0.0 S6.1, TS25.212 V8.1.0 Figure 16, TS25.212 V8.1.0 S4.5, TS25.212 V8.1.0 S4.5.1a, TS25.212 V8.1.0 S4.6.1, TS25.212 V8.1.0 S4.6.2.2, TS25.212 V8.1.0 S4.6.2.3, TS25.213 V8.0.0 S5.1.1, TS25.213 V8.0.0 Table 3A, TS25.301 V8.0.0 S1, TS25.301 V8.0.0 S5.2.2 |
| 288 T | Panasonic | US 7352822 | | 25/03/2013 | Telephone for transmitting an uplink signal to a base station and for receiving first and second downlink signals from the base station, and a base station for receiving an uplink signal from a telephone and transmitting first and second downlink signals | 1 | TS25.201 V8.0.0 S4.2.3, TS25.211 V8.0.0 Figure 26B, TS25.211 V8.0.0 Figure 27, TS25.211 V8.0.0 S4.1.2, TS25.211 V8.0.0 S4.1.2.7, TS25.211 V8.0.0 S5.2.1, TS25.211 V8.0.0 S5.2.1.1, TS25.211 V8.0.0 S5.3.3.12, TS25.211 V8.0.0 S5.3.3.13, TS25.211 V8.0.0 S6.1, TS25.211 V8.0.0 Table 26, TS25.212 V8.1.0 S4.6.1, TS25.212 V8.1.0 S4.6.2.2, TS25.212 V8.1.0 S4.6.2.3, TS25.213 V8.0.0 Figure 1, TS25.213 V8.0.0 Figure 1A, TS25.213 V8.0.0 S3.2, TS25.213 V8.0.0 S4.2.1, TS25.213 V8.0.0 S4.2.1.1, TS25.213 V8.0.0 S5.1.1, TS25.213 V8.0.0 Table 3A, TS25.301 V8.0.0 S5.2.2 |
| 289 T | Panasonic | JP 3174779 | | 22/08/2016 | An apparatus and a method for generating a dispersed excitation vector | 1, 2 | TS26.090 V3.1.0 S3.1, TS26.090 V3.1.0 S3.2, TS26.090 V3.1.0 S5.7.1, TS26.090 V3.1.0 S6.1, TS26.090 V3.1.0 Table 6 |

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| 290 | | | | | | | |
| T | Panasonic | US 7362813 | | 25/03/2013 | Communication system. | 5 | TS25.104 V5.9.0 S3.2, TS25.201 V5.3.0 S5.5, TS25.201 V8.0.0 S4.2.3, TS25.211 V8.0.0 Figure 27, TS25.211 V8.0.0 S4.1.2, TS25.211 V8.0.0 S4.1.2.7, TS25.211 V8.0.0 S5.2.1, TS25.211 V8.0.0 S5.2.1.1, TS25.211 V8.0.0 S5.3.3.12, TS25.211 V8.0.0 S5.3.3.13, TS25.211 V8.0.0 S6.1, TS25.212 V8.1.0 S4.6.1, TS25.212 V8.1.0 S4.6.2.2, TS25.212 V8.1.0 S4.6.2.3, TS25.213 V8.0.0 Figure 1, TS25.213 V8.0.0 Figure 1A, TS25.213 V8.0.0 S3.2, TS25.213 V8.0.0 S4.2.1, TS25.213 V8.0.0 S4.2.1.1, TS25.213 V8.0.0 S5.1, TS25.213 V8.0.0 S5.1.1, TS25.213 V8.0.0 S5.1.4, TS25.213 V8.0.0 S5.2.2, TS25.213 V8.0.0 Table 3A, TS25.301 V8.0.0 S5.2.2 |
| <hr/> | | | | | | | |
| 291 | | | | | | | |
| T | Fujitsu | JP 3966420 | | 18/05/2012 | Communication method and transmission circuit. | 1 | TS25.201 V5.3.0 S4.2.3, TS25.211 V6.2.0 Fig. 26B, TS25.211 V6.2.0 Fig. 29, TS25.211 V6.2.0 Fig. 35, TS25.211 V6.2.0 Fig. 9, TS25.211 V6.2.0 S5.3.2, TS25.211 V6.2.0 S5.3.3.13, TS25.211 V6.2.0 S7.1, TS25.211 V6.2.0 S7.8, TS25.211 V6.2.0 Table 26, TS25.301 V5.3.0 Fig. 4, TS25.301 V5.3.0 S5.3.1.1.2.2, TS25.301 V5.3.0 S5.6.9.2, TS25.331 V5.6.0 S10.2.33, TS25.331 V5.6.0 S10.2.40, TS25.331 V5.6.0 S10.3.5.1 |
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| 292 | | | | | | | |
| T | Fujitsu | JP 4177924 | | 17/08/2018 | Radio Packet Communication System, Mobile Station and Base Station Used for the Radio Packet Communication System, and Packet Transfer Method in the Radio Packet Communication System. | 1 | TR25.990 V0.1.4 S3, TS25.211 V5.8.0 Figure 35, TS25.211 V5.8.0 S3.2, TS25.211 V5.8.0 S4.1.2.7, TS25.211 V5.8.0 S5.3.3.12, TS25.211 V5.8.0 S5.3.3.13, TS25.211 V5.8.0 S7.8, TS25.212 V5.10.0 S4.6, TS25.306 V8.5.0 Table 5.1a, TS25.308 V5.7.0 S1, TS25.308 V5.7.0 S3.2, TS25.308 V5.7.0 S4, TS25.308 V5.7.0 S5.2.2.1, TS25.321 V5.14.0 Figure 4.2.3.1, TS25.321 V5.14.0 S11.6.1, TS25.321 V5.14.0 S11.6.1.3, TS25.321 V5.14.0 S11.6.2.2, TS25.321 V5.14.0 S3.2, TS25.321 V5.14.0 S4.2.3, TS25.321 V5.14.0 S4.2.3.3 |
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| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|--|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 293 CN, T | Toshiba | JP 3420222 | | 01/04/2014 | Gain-shape vector quantization method and its application to the speech coding method and apparatus. | 2, 6 | TS26.090 V7.0.0 S1, TS26.090 V7.0.0 S3.1, TS26.090 V7.0.0 S3.2, TS26.090 V7.0.0 S4.3, TS26.090 V7.0.0 S4.4, TS26.090 V7.0.0 S5.2.1, TS26.090 V7.0.0 S5.5, TS26.090 V7.0.0 S5.6.1, TS26.090 V7.0.0 S5.7.1, TS26.090 V7.0.0 S5.7.2, TS26.090 V7.0.0 S5.8.2 |
| 294 BS, T | Panasonic | EP 0668669 | DE, FR, GB | 17/02/2015 | Data communication system controlling the information transmission bit rate or source encoding rate. | 3 | TS24.008 V5.16.0 S6.1.3.1, TS24.008 V5.16.0 S6.1.3.1.1, TS27.001 V5.10.0 figure 2, TS27.001 V5.10.0 S4, TS27.001 V5.10.0 S5, TS34.123-1 V5.4.0 S1, TS34.123-1 V5.4.0 S11.1.1.2.1.2, TS34.123-1 V5.4.0 S11.1.1.2.1.3, TS34.123-1 V5.4.0 S11.1.1.2.1.4, TS34.123-1 V5.4.0 S11.1.1.2.1.5 |
| 295 T | Panasonic | EP 1760981 | DE, FR, GB | 27/12/2021 | Data reception method. | 1, 3 | TS25.101 V5.20.0 S5.2, TS25.101 V5.20.0 S9.2.1.2, TS25.101 V5.20.0 Table 5, TS25.101 V5.20.0 Table 9.4, TS25.201 V5.3.0 S4.1.2, TS25.212 V5.10.0 S4.5, TS25.212 V5.10.0 S4.5.7, TS25.212 V5.10.0 S4.6.2.1, TS25.212 V5.10.0 Table 11, TS25.212 V5.10.0 Table 12, TS25.213 V5.6.0 Fig.8, TS25.213 V5.6.0 S5.1, TS25.308 V5.7.0 S4, TS25.308 V5.7.0 S7.1.2.1, TS25.321 V5.13.0 S11.6.1.2, TS25.321 V5.13.0 S11.6.1.3, TS25.321 V5.13.0 S11.6.2.1, TS25.321 V5.13.0 S11.6.2.2, TS25.321 V5.13.0 S4.2.4.3 |
| 296 T | Panasonic | US 6760590 | | 01/04/2022 | Communication terminal apparatus, Base station apparatus, and Radio communication method. | 3 | TS25.211 V5.8.0 Figure 2A, TS25.211 V5.8.0 S5.2.1, TS25.212 V5.10.0 Figure 20, TS25.212 V5.10.0 S4.7, TS25.212 V5.10.0 S4.7.1, TS25.212 V5.10.0 S4.7.1.2, TS25.212 V5.10.0 Table 14, TS25.214 V5.11.0 S6A.1, TS25.214 V5.11.0 S6A.1.2, TS25.214 V5.11.0 S6A.2, TS25.214 V5.11.0 S6A.3, TS25.214 V5.11.0 Table 7A, TS25.321 V5.13.0 Figure 4.2.3.1, TS25.321 V5.13.0 S3.2, TS25.321 V5.13.0 S4.2.3 |

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|---|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 297 | | | | | | | |
| T | Panasonic | US 7206587 | | 01/04/2022 | Communication terminal apparatus, Base station apparatus, and Radio communication method. | 4 | TS25.211 V5.7.0 Fig 2A, TS25.211 V5.8.0 S5.2.1, TS25.212 V5.10.0 Figure 20, TS25.212 V5.10.0 S4.7, TS25.212 V5.10.0 S4.7.1.2, TS25.212 V5.10.0 Table 14, TS25.214 V5.11.0 S6A.1.2, TS25.214 V5.11.0 S6A.2, TS25.214 V5.11.0 Table 7A, TS25.321 V5.13.0 Figure 4.2.3.1, TS25.321 V5.13.0 S4.2.3 |
| 298 | | | | | | | |
| T | Mitsubishi | EP 1471676 | DE, FR, GB | 21/08/2022 | Mobile station and communication system | 1 | TS25.211 V5.0.0 Figure 3, TS25.211 V5.0.0 S5.2.1, TS25.213 V5.0.0 Figure 1, TS25.213 V5.0.0 Figure 7, TS25.213 V5.0.0 S4.1, TS25.213 V5.0.0 S4.2.1, TS25.213 V5.0.0 S4.4.1, TS25.213 V5.0.0 S4.4.2, TS25.308 V5.2.0 S4, TS25.308 V5.2.0 S5.1 |
| 299 | | | | | | | |
| BS, T | Mitsubishi | EP 1830475 | DE, FR, GB | 05/03/2019 | Spread spectrum communication device | 1 | TS25.201 V8.1.0 S4.1.1, TS25.211 V5.4.0 S5.2.1, TS25.211 V5.4.0 Table 2, TS25.212 V5.3.0 Fig. 11, TS25.212 V5.3.0 S1, TS25.212 V5.3.0 S3.1, TS25.212 V5.3.0 S4.2, TS25.212 V5.3.0 S4.4, TS25.212 V5.3.0 S4.4.3, TS25.214 V5.4.0 S5.1.2.2.1, TS25.214 V5.4.0 S5.1.2.2.2.1, TS25.214 V5.4.0 S5.1.2.3, TS25.214 V5.4.0 Table 2, TS25.215 V5.6.0 S6.1.1.1, TS25.215 V5.6.0 S6.1.1.2 |
| 300 | | | | | | | |
| T | Mitsubishi | EP 1830478 | DE, FR, GB | 05/03/2019 | Spread spectrum communication method | 1 | TS25.101 V5.3.0 A5, TS25.101 V5.3.0 Table A.22, TS25.211 V5.4.0 S5.2.1, TS25.211 V5.4.0 Table 2, TS25.212 V5.3.0 Fig. 11, TS25.212 V5.3.0 Figure 1, TS25.212 V5.3.0 Figure 14, TS25.212 V5.3.0 Figure15, TS25.212 V5.3.0 S1, TS25.212 V5.3.0 S4.2, TS25.212 V5.3.0 S4.2.11, TS25.212 V5.3.0 S4.2.12.1, TS25.212 V5.3.0 S4.4, TS25.212 V5.3.0 S4.4.3.1, TS25.212 V5.3.0 S4.4.3.2, TS25.212 V5.3.0 S4.4.4, TS25.214 V5.4.0 S5.1.2.2.1, TS25.214 V5.4.0 S5.1.2.2.2.1, TS25.214 V5.4.0 S5.1.2.3, TS25.214 V5.4.0 Table 2 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|--|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 301 | | | | | | | |
| BS, T | Mitsubishi | US 6829489 | | 10/08/2021 | Communication system, transmitter, receiver, and communication method *With effect from 1 July 2010, the effective ownership of this patent has been transferred to Sony Corporation: the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license. | 17, 18, 19 | TS25.212 V5.3.0 Fig. 11, TS25.212 V5.3.0 Figure 14, TS25.212 V5.3.0 Figure 15, TS25.212 V5.3.0 S4.4, TS25.212 V5.3.0 S4.4.3, TS25.212 V5.3.0 S4.4.4, TS25.214 V5.4.0 S5.1.2.2, TS25.214 V5.4.0 S5.1.2.2.1, TS25.214 V5.4.0 S5.1.2.3, TS25.214 V5.4.0 S5.2.1.2.1, TS25.214 V5.4.0 S5.2.1.3, TS34.123-1 V8.6.0 S8.4.1.40.2, TS34.123-1 V8.6.0 S8.4.1.40.3, TS34.123-1 V8.6.0 S8.4.1.40.4, TS34.123-1 V8.6.0 Table 8.4.1.40.4-1 |
| 302 | | | | | | | |
| T | Mitsubishi | KR 10-864893 | | 27/01/2026 | Active set controlling method *With effect from 1 July 2010, the effective ownership of this patent has been transferred to Sony Corporation: the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license. | 1 | TS25.303 V6.3.0 S6.4.1 Figure 25, TS25.303 V6.3.0 S6.4.6 Figure 32, TS25.331 V6.9.0 Figure 14.1.2.7-1, TS25.331 V6.9.0 S10.3.7.39, TS25.331 V6.9.0 S14.1.1, TS25.331 V6.9.0 S14.1.2, TS25.331 V6.9.0 S14.1.2.7 |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

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|---|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 303 | | | | | | | |
| T | FT | EP 0960542 | DE, ES, FR, GB, IT | 19/01/2018 | Removable Data Store for an User Interface Device 18 | | TS21.111 V7.1.0 S1, TS21.111 V7.1.0 S11.2, TS21.111 V7.1.0 S4, TS21.111 V7.1.0 S5.1, TS21.111 V7.1.0 S5.2, TS21.111 V7.1.0 S6.1, TS31.101 V7.0.1 S8.1, TS31.102 V7.13.0 Figure 4.2, TS31.102 V7.13.0 S4.4.2, TS31.102 V7.13.0 S4.7, TS31.102 V7.13.0 S5.1.1.1, TS31.102 V7.13.0 S5.3.29 |
| T | FT | US 6856818 | | 19/01/2018 | Data store for mobile radio station | 18 | TS21.111 V7.1.0 S1, TS21.111 V7.1.0 S11.2, TS21.111 V7.1.0 S4, TS21.111 V7.1.0 S5.1, TS21.111 V7.1.0 S5.2, TS21.111 V7.1.0 S6.1, TS31.101 V7.0.1 S8.1, TS31.102 V7.13.0 Figure 4.2, TS31.102 V7.13.0 S4.4.2, TS31.102 V7.13.0 S4.7, TS31.102 V7.13.0 S5.1.1.1, TS31.102 V7.13.0 S5.3.29 |
| T | FT | CN 1130095 | | 19/01/2018 | Removable Data Store for an User Interface Device 18 | | TS21.111 V7.1.0 S1, TS21.111 V7.1.0 S11.2, TS21.111 V7.1.0 S4, TS21.111 V7.1.0 S5.1, TS21.111 V7.1.0 S5.2, TS21.111 V7.1.0 S6.1, TS31.101 V7.0.1 S8.1, TS31.102 V7.13.0 Figure 4.2, TS31.102 V7.13.0 S4.4.2, TS31.102 V7.13.0 S4.7, TS31.102 V7.13.0 S5.1.1.1, TS31.102 V7.13.0 S5.3.29 |
| T | FT | IN 208486 | | 09/02/2018 | A modified standard subscriber data storage module | 18 | TS21.111 V7.1.0 S10.2.2, TS21.111 V7.1.0 S11.2, TS21.111 V7.1.0 S4, TS31.102 V7.13.0 Figure 4.1, TS31.102 V7.13.0 Figure 4.2, TS31.102 V7.13.0 S4.4.2, TS31.102 V7.13.0 S4.7, TS31.102 V7.13.0 S5.1.1.1 |
| T | FT | AU 729163 | | 19/01/2018 | Data store for mobile radio station | 18 | TS21.111 V7.1.0 S1, TS21.111 V7.1.0 S11.2, TS21.111 V7.1.0 S4, TS21.111 V7.1.0 S5.1, TS21.111 V7.1.0 S5.2, TS21.111 V7.1.0 S6.1, TS31.101 V7.0.1 S8.1, TS31.102 V7.13.0 Figure 4.2, TS31.102 V7.13.0 S4.4.2, TS31.102 V7.13.0 S4.7, TS31.102 V7.13.0 S5.1.1.1, TS31.102 V7.13.0 S5.3.29 |
| T | FT | CA 2280150 | | 19/01/2018 | Removable data store | 18 | TS21.111 V7.1.0 S1, TS21.111 V7.1.0 S11.2, TS21.111 V7.1.0 S4, TS21.111 V7.1.0 S5.1, TS21.111 V7.1.0 S5.2, TS21.111 V7.1.0 S6.1, TS31.101 V7.0.1 S8.1, TS31.102 V7.13.0 Figure 4.2, TS31.102 V7.13.0 S4.4.2, TS31.102 V7.13.0 S4.7, TS31.102 V7.13.0 S5.1.1.1, TS31.102 V7.13.0 S5.3.29 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|--|--------------------------------|----------------------|---|---|---|-------------------------|---|
| T | FT | JP 4357596 | | 19/01/2018 | Removable data store | 18 | TS21.111 V7.1.0 S1, TS21.111 V7.1.0 S11.2, TS21.111 V7.1.0 S4, TS21.111 V7.1.0 S5.1, TS21.111 V7.1.0 S5.2, TS21.111 V7.1.0 S6.1, TS31.101 V7.0.1 S8.1, TS31.102 V7.13.0 Figure 4.2, TS31.102 V7.13.0 S3.3, TS31.102 V7.13.0 S4.4.2, TS31.102 V7.13.0 S4.7, TS31.102 V7.13.0 S5.1.1.1, TS31.102 V7.13.0 S5.3.29 |
| 304 | | | | | | | |
| BS, T | NEC | KR 100854991 | | 19/05/2024 | Rate control method and apparatus for data packet transmission | 1, 16, 17 | TS25.214 V25.214 S5.1.2.5B.2.2, TS25.214 V6.11.0 S5.1.2.5B.2.1, TS25.214 V6.11.0 S5.1.2.5B.2.3, TS25.321 V6.17.0 Annex B, TS25.321 V6.17.0 B4 Table 1, TS25.321 V6.17.0 S11.8.1.3, TS25.321 V6.17.0 S11.8.1.3.1, TS25.321 V6.17.0 S11.8.1.4, TS25.321 V6.17.0 S3.1.2, TS25.321 V6.17.0 S9.2.5.2, TS25.321 V6.17.0 S9.2.5.2.1, TS25.321 V6.17.0 S9.2.5.2.2, TS25.321 V6.17.0 Table 9.2.5.2.1.1, TS25.410 V6.5.0 Fig. 4.1, TS25.410 V6.5.0 S4.1.1 |
| 305 | | | | | | | |
| BS, T | Panasonic | JP 4116925 | | 13/05/2023 | A radio base station apparatus, a control station apparatus, a communication terminal apparatus, a method for generating a transmission signal, a reception method and a radio communication system | 12, 20 | TS25.211 V6.9.0 Fig. 12A, TS25.211 V6.9.0 S5, TS25.211 V6.9.0 S5.3.2, TS25.211 V6.9.0 S5.3.2.4, TS25.211 V6.9.0 S5.3.2.5, TS25.213 V6.5.0 Fig. 11, TS25.213 V6.5.0 Fig. 8, TS25.213 V6.5.0 Fig. 9, TS25.213 V6.5.0 S5.1, TS25.213 V6.5.0 S5.1.5, TS25.213 V6.5.0 S5.2.1, TS25.213 V6.5.0 S5.3.2, TS25.309 V6.3.0 S14.1, TS25.309 V6.6.0 S6.3.2 |
| 306 | | | | | | | |
| T | Panasonic | JP 4145915 | | 18/11/2022 | A transmission apparatus and a reception apparatus | 7, 9 | TS25.212 V5.10.0 Figure 16, TS25.212 V5.10.0 S4.5, TS25.212 V5.10.0 S4.5.7, TS25.212 V5.10.0 S4.6, TS25.212 V5.10.0 S4.6.2.1, TS25.212 V5.10.0 Table 11, TS25.212 V5.10.0 Table 12, TS25.321 V5.13.0 S11.6.1.1, TS25.321 V5.13.0 S11.6.1.3, TS25.321 V5.13.0 S11.6.2.1, TS25.321 V5.13.0 S11.6.2.2, TS25.321 V5.13.0 S4.2.4.3 |
| 307 | | | | | | | |
| T | Panasonic | US 7460880 | | 25/02/2022 | Communication Terminal Apparatus and Base Station Apparatus | 1 | TS25.101 V5.20.0 S3.2, TS25.101 V5.20.0 S5.2, TS25.101 V5.20.0 Table 5, TS25.214 V5.11.0 S6A.1, TS25.214 V5.11.0 S6A.1.2, TS25.214 V5.11.0 S6A.2, TS25.214 V5.11.0 Table 7A, TS25.214 V5.11.0 Table 7B, TS25.214 V5.11.0 Table 7C |

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|---|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 308 | | | | | | | |
| T | Panasonic | US 7471740 | | 18/11/2022 | Arq Retransmission with Reordering Scheme Employing Multiple Redundancy Versions and Receiver/Transmitter Therefor | 29 | TS25.212 V5.10.0 S4.5, TS25.212 V5.10.0 S4.5.4, TS25.212 V5.10.0 S4.5.4.3, TS25.212 V5.10.0 S4.5.7, TS25.212 V5.10.0 S4.6.2.1, TS25.212 V5.10.0 Table 12, TS25.301 V5.6.0 S5.3.1.2, TS25.321 V5.13.0 S11.6.1.3, TS25.321 V5.13.0 S11.6.2.1, TS25.321 V5.13.0 S4.2.4, TS25.321 V5.13.0 S4.2.4.3 |
| 309 | | | | | | | |
| BS, T | SK Telecom | KR 0364583 | | 01/12/2019 | Apparatus and Method for repeating and transmitting of memory-less error correction channel coded signal | 1, 16 | TS25.211 V6.9.0 figure 2B, TS25.211 V6.9.0 Figure 9, TS25.211 V6.9.0 S5.2.1, TS25.211 V6.9.0 S5.2.1.3, TS25.211 V6.9.0 S5.3.2, TS25.211 V6.9.0 Table 11, TS25.211 V6.9.0 Table 5C, TS25.212 V6.10.0 S4.3.5.1, TS25.212 V6.10.0 Figure 23, TS25.212 V6.10.0 Figure 9, TS25.212 V6.10.0 S4.3.3, TS25.212 V6.10.0 S4.9, TS25.212 V6.10.0 S4.9.1, TS25.212 V6.10.0 S4.9.4, TS25.212 V6.10.0 S4.9.5, TS25.213 V6.5.0 Fig. 8, TS25.213 V6.5.0 Figure 1, TS25.213 V6.5.0 Figure 7, TS25.213 V6.5.0 S4.2.1, TS25.213 V6.5.0 S4.4.2, TS25.213 V6.5.0 S5.1, TS25.213 V6.5.0 S5.1.1, TS25.213 V6.5.0 Table 0, TS25.213 V6.5.0 Table 3A |
| BS, T | SK Telecom | DE 10059873 | | 01/12/2020 | Apparatus and method for repeatedly transmitting and receiving symbols made by a memory-less ECC technique | 1, 18 | TS25.211 V6.9.0 figure 2B, TS25.211 V6.9.0 Figure 9, TS25.211 V6.9.0 S5.2.1, TS25.211 V6.9.0 S5.2.1.3, TS25.211 V6.9.0 S5.3.2, TS25.211 V6.9.0 Table 11, TS25.211 V6.9.0 Table 5C, TS25.212 V6.10.0 S4.3.5.1, TS25.212 V6.10.0 Figure 23, TS25.212 V6.10.0 Figure 9, TS25.212 V6.10.0 S4.3.3, TS25.212 V6.10.0 S4.9, TS25.212 V6.10.0 S4.9.1, TS25.212 V6.10.0 S4.9.4, TS25.212 V6.10.0 S4.9.5, TS25.213 V6.5.0 Fig. 8, TS25.213 V6.5.0 Figure 1, TS25.213 V6.5.0 Figure 7, TS25.213 V6.5.0 S4.2.1, TS25.213 V6.5.0 S4.4.2, TS25.213 V6.5.0 S5.1, TS25.213 V6.5.0 S5.1.1, TS25.213 V6.5.0 Table 0, TS25.213 V6.5.0 Table 3A |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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|---|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 310 | | | | | | | |
| T | KPN | EP 0716796 | CH, DE, FR, GB, NL, SE | 31/08/2014 | Mobile Communication System with Overlapping Domains | 1, 3 | TS31.102 V8.5.0 S4.2.17, TS31.102 V8.5.0 S4.2.3, TS31.102 V8.5.0 S4.2.5, TS43.318 V8.3.0 Annex C Section C.1, TS43.318 V8.3.0 Figure 56, TS43.318 V8.3.0 Figure 8, TS43.318 V8.3.0 S1, TS43.318 V8.3.0 S5.1, TS43.318 V8.3.0 S7.1, TS43.318 V8.3.0 S7.2.2, TS43.318 V8.3.0 S8.4.1, TS43.318 V8.3.0 S9.14.2, TS43.318 V8.3.0 S9.14.2.1 |
| 311 | | | | | | | |
| BS, T | NTT | JP 3243108 | | 08/02/2014 | Spread-spectrum Radio Communication System | 1 | TS25.101 V8.5.1 S5.1, TS25.201 V8.1.0 S4.1.2, TS25.211 V8.3.0 S4.2, TS25.211 V8.3.0 S5.2.1.1, TS25.211 V8.3.0 Table 1, TS25.211 V8.3.0 Table 2, TS25.213 V8.3.0 Figure 1, TS25.213 V8.3.0 Figure 7, TS25.213 V8.3.0 S4.1, TS25.213 V8.3.0 S4.2.1, TS25.213 V8.3.0 S4.3.1.2.1, TS25.213 V8.3.0 S4.3.1.2.2, TS25.213 V8.3.0 S4.3.1.2.3, TS25.213 V8.3.0 S4.4.2, TS25.213 V8.3.0 Table 0, TS25.213 V8.3.0 Table 1D, TS25.213 V8.3.0 Table 1E, TS25.303 V8.0.0 Figure 18, TS25.303 V8.0.0 S6.2.6 |
| BS, T | NTT | JP 3479777 | | 08/02/2014 | Radio Transmitter and Radio Receiver for Spread-spectrum Radio Communication | 1 | TS25.101 V8.5.1 S5.1, TS25.101 V8.5.1 S6.1, TS25.101 V8.5.1 S7.1, TS25.104 V8.6.0 S6.1, TS25.104 V8.6.0 S7.1, TS25.106 V8.1.0 S3.1, TS25.211 V8.3.0 S5.2.1.1, TS25.211 V8.3.0 Table 1, TS25.211 V8.3.0 Table 2, TS25.213 V8.3.0 Figure 1, TS25.213 V8.3.0 Figure 7, TS25.213 V8.3.0 S4.1, TS25.213 V8.3.0 S4.2.1, TS25.213 V8.3.0 S4.3.1.2.1, TS25.213 V8.3.0 S4.3.1.2.2, TS25.213 V8.3.0 S4.3.1.2.3, TS25.213 V8.3.0 S4.4.2, TS25.213 V8.3.0 Table 0, TS25.213 V8.3.0 Table 1D, TS25.213 V8.3.0 Table 1E, TS25.303 V8.0.0 Figure 18, TS25.303 V8.0.0 S6.2.6 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
| Page 119 of 132 | | | | | | | |

| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|--|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 312 | | | | | | | |
| BS, T | NTT | JP 3243109 | | 08/02/2014 | Spread-spectrum Radio Communication System | 1 | TS25.101 V8.5.1 S5.1, TS25.101 V8.5.1 S6.1, TS25.101 V8.5.1 S6.5.3, TS25.101 V8.5.1 S7.1, TS25.104 V8.6.0 S6.1, TS25.104 V8.6.0 S7.1, TS25.106 V8.1.0 S3.1, TS25.201 V8.1.0 S4.1.2, TS25.211 V8.3.0 S5.2.1.1, TS25.211 V8.3.0 Table 1, TS25.211 V8.3.0 Table 2, TS25.213 V8.3.0 Figure 1, TS25.213 V8.3.0 Figure 1A, TS25.213 V8.3.0 Figure 1B, TS25.213 V8.3.0 Figure 1C, TS25.213 V8.3.0 Figure 7, TS25.213 V8.3.0 S4.1, TS25.213 V8.3.0 S4.2.1, TS25.213 V8.3.0 S4.2.1.1, TS25.213 V8.3.0 S4.2.1.2, TS25.213 V8.3.0 S4.2.1.3, TS25.213 V8.3.0 S4.3.1.2.1, TS25.213 V8.3.0 S4.3.1.2.2, TS25.213 V8.3.0 S4.3.1.2.3, TS25.213 V8.3.0 S4.4.2, TS25.213 V8.3.0 Table 0, TS25.213 V8.3.0 Table 1D, TS25.213 V8.3.0 Table 1E, TS25.214 V8.4.0 S5.1.2.2.1, TS25.214 V8.4.0 S5.1.2.5.1, TS25.303 V8.0.0 Figure 18, TS25.303 V8.0.0 S6.2.6 |
| BS, T | NTT | JP 3479778 | | 08/02/2014 | Radio Transmitter and Radio Receiver for Spread-spectrum Radio Communication | 1 | TS25.101 V8.5.1 S5.1, TS25.101 V8.5.1 S6.1, TS25.101 V8.5.1 S6.5.3, TS25.101 V8.5.1 S7.1, TS25.104 V8.6.0 S6.1, TS25.104 V8.6.0 S7.1, TS25.106 V8.1.0 S3.1, TS25.211 V8.3.0 S5.2.1.1, TS25.211 V8.3.0 Table 1, TS25.211 V8.3.0 Table 2, TS25.213 V8.3.0 Figure 1, TS25.213 V8.3.0 Figure 1A, TS25.213 V8.3.0 Figure 1B, TS25.213 V8.3.0 Figure 1C, TS25.213 V8.3.0 Figure 7, TS25.213 V8.3.0 S1, TS25.213 V8.3.0 S4.1, TS25.213 V8.3.0 S4.2.1, TS25.213 V8.3.0 S4.2.1.1, TS25.213 V8.3.0 S4.2.1.2, TS25.213 V8.3.0 S4.2.1.3, TS25.213 V8.3.0 S4.3.1.2.1, TS25.213 V8.3.0 S4.3.1.2.2, TS25.213 V8.3.0 S4.3.1.2.3, TS25.213 V8.3.0 S4.4.2, TS25.213 V8.3.0 Table 0, TS25.213 V8.3.0 Table 1D, TS25.213 V8.3.0 Table 1E, TS25.214 V8.4.0 S5.1.2.2.1, TS25.214 V8.4.0 S5.1.2.5.1, TS25.303 V8.0.0 Figure 18, TS25.303 V8.0.0 S6.2.6 |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|---|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 313 | | | | | | | |
| BS, T | Mitsubishi | EP 1865630 | DE, FR, GB | 30/03/2024 | Mobile Communications Terminal and Radio Communication System *With effect from 1 July 2010, the effective ownership of this patent has been transferred to Sony Corporation: the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license. | 1 | TS25.211 V6.7.0 S5.3.3.1, TS25.211 V6.7.0 S5.3.3.1.1, TS25.212 V6.5.0 S4.1, TS25.215 V6.4.0 S5.1.9, TS25.301 V6.5.0 Fig 2, TS25.301 V6.5.0 S5.1, TS25.331 V6.6.0 Figure 8.7.2-1, TS25.331 V6.6.0 S10.2.16k, TS25.331 V6.6.0 S10.2.16m, TS25.331 V6.6.0 S10.3.9a.12, TS25.331 V6.6.0 S3.3, TS25.331 V6.6.0 S8.7.1.3, TS25.331 V6.6.0 S8.7.2, TS25.331 V6.6.0 S8.7.2.3, TS25.331 V6.6.0 S8.7.5.4, TS25.346 V6.5.0 S1, TS25.346 V6.5.0 S10.2, TS25.346 V6.5.0 S3.3, TS25.346 V6.5.0 S4, TS25.346 V6.5.0 S5.1.5, TS25.346 V6.5.0 S5.2.3, TS25.346 V6.5.0 S6.2.1.2, TS25.346 V6.5.0 S7, TS25.346 V6.5.0 S7.3.1 |
| 314 | | | | | | | |
| BS, T | Mitsubishi | EP 1871018 | DE, FR, GB | 30/03/2024 | Mobile Communications Terminal and Radio Communication System *With effect from 1 July 2010, the effective ownership of this patent has been transferred to Sony Corporation: the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license. | 1 | TS25.211 V6.7.0 S5.3.3.1, TS25.211 V6.7.0 S5.3.3.1.1, TS25.212 V6.5.0 S4.1, TS25.215 V6.4.0 S5.1.9, TS25.301 V6.5.0 Fig 2, TS25.301 V6.5.0 S5.1, TS25.331 V6.6.0 Figure 8.7.2-1, TS25.331 V6.6.0 S10.2.16k, TS25.331 V6.6.0 S10.2.16m, TS25.331 V6.6.0 S10.3.9a.12, TS25.331 V6.6.0 S3.2, TS25.331 V6.6.0 S8.7.2, TS25.331 V6.6.0 S8.7.2.3, TS25.331 V6.6.0 S8.7.5.4, TS25.346 V6.5.0 S1, TS25.346 V6.5.0 S10.2, TS25.346 V6.5.0 S3.3, TS25.346 V6.5.0 S5.1.5, TS25.346 V6.5.0 S5.2.3, TS25.346 V6.5.0 S6.2, TS25.346 V6.5.0 S6.2.1.2, TS25.346 V6.5.0 S7.1, TS25.346 V6.5.0 S7.3.1 |
| 315 | | | | | | | |
| T | Mitsubishi | JP 4236941 | | 04/03/2019 | Mobile Radio Communication System, Communication Device Applied to Mobile Radio Communication System and Mobile Radio Communication Method | 2, 6 | TS25.133 V6.0.1 S8.1.2.5, TS25.133 V6.0.1 S8.1.2.5.2.1, TS25.133 V6.0.1 Table 8.7, TS25.201 V3.4.0 S4.1.1, TS25.211 V5.4.0 Figure 9, TS25.211 V5.4.0 S1, TS25.211 V5.4.0 S3.2, TS25.211 V5.4.0 S5, TS25.211 V5.4.0 S5.3.2, TS25.212 V5.3.0 S4.2, TS25.212 V5.3.0 S4.2 Figure 2, TS25.212 V5.3.0 S4.2.11, TS25.212 V5.3.0 S4.4, TS25.212 V5.3.0 S4.4 Fig. 11, TS25.215 V5.6.0 Fig. 1, TS25.215 V5.6.0 S6.1.1.1, TS25.215 V5.6.0 S6.1.1.2, TS45.001 V4.4.0 Fig. 1, TS45.001 V4.4.0 Fig. 3, TS45.001 V4.4.0 S1, TS45.001 V4.4.0 S5.1 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|---|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 316 | | | | | | | |
| T | Mitsubishi | JP 4249244 | | 04/03/2019 | Receiver | 2 | TS25.133 V6.0.0 S8.1.2.5, TS25.133 V6.0.0 S8.1.2.5.1, TS25.133 V6.0.0 S8.1.2.5.2.1, TS25.133 V6.0.0 Table 8.7, TS25.201 V5.3.0 S4.2.1, TS25.211 V5.4.0 Fig. 9, TS25.211 V5.4.0 S5.3.2, TS25.212 V5.3.0 Fig. 11, TS25.212 V5.3.0 Figure 14, TS25.212 V5.3.0 Figure 15, TS25.212 V5.3.0 S4.2.11, TS25.212 V5.3.0 S4.4, TS25.212 V5.3.0 S4.4.4, TS25.215 V5.6.0 Fig. 1, TS25.215 V5.6.0 S6.1.1.1, TS25.215 V5.6.0 S6.1.1.2, TS45.001 V4.4.0 Fig. 1, TS45.001 V4.4.0 Fig. 3, TS45.001 V4.4.0 S5.1 |
| 317 | | | | | | | |
| T | Mitsubishi | US 7379476 | | 04/03/2019 | Mobile Radio Communication System, Communication Apparatus Applied in a Mobile Radio Communication System, and Mobile Radio Communication Method | 2 | TS25.101 V5.20.0 S3.2, TS25.133 V6.0.0 S8.1.2.5, TS25.133 V6.0.0 S8.1.2.5.2, TS25.133 V6.0.0 S8.1.2.5.2.1, TS25.133 V6.0.0 Table 8.5, TS25.133 V6.0.0 Table 8.7, TS25.201 V5.3.0 S4.1.1, TS25.211 V5.4.0 Fig. 9, TS25.211 V5.4.0 S5, TS25.211 V5.4.0 S5.3.2, TS25.212 V5.3.0 Figure 11, TS25.212 V5.3.0 S4.4, TS25.215 V5.6.0 Fig. 1, TS25.215 V5.6.0 S6.1.1.1, TS25.215 V5.6.0 S6.1.1.2, TS45.001 V4.4.0 Fig. 1, TS45.001 V4.4.0 Fig. 3, TS45.001 V4.4.0 Figure 2, TS45.001 V4.4.0 Figure 2a1, TS45.001 V4.4.0 Figure 2a2, TS45.001 V4.4.0 Figure 2b, TS45.001 V4.4.0 S5, TS45.001 V4.4.0 S5.1, TS45.001 V4.4.0 S5.2, TS45.001 V4.4.0 S5.3 |
| 318 | | | | | | | |
| BS, RNC, T | NTT | JP 3312718 | | 02/09/2016 | A CDMA Method | 1 | TS22.060 V8.0.0 S6.1.1, TS23.060 V8.3.0 S4, TS23.060 V8.3.0 S6.3.3.1, TS23.060 V8.3.0 Table 2, TS25.211 V8.3.0 Figure 27, TS25.211 V8.3.0 S5.2.1.1, TS25.211 V8.3.0 S5.3.3.13, TS25.211 V8.3.0 S6.1, TS25.213 V8.3.0 Figure 8, TS25.213 V8.3.0 S3.1, TS25.213 V8.3.0 S5.1, TS25.213 V8.3.0 S5.2.1, TS25.301 V8.4.0 Figure 3, TS25.301 V8.4.0 S5.3.1.1.1, TS25.301 V8.4.0 S5.3.1.1.2.2, TS25.303 V8.0.0 S6.2.1.1, TS25.308 V8.4.0 S4, TS25.308 V8.4.0 S5.2.2.1 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|---|--------------------------------|----------------------|---|---|--|-------------------------|---|
| 319 | | | | | | | |
| T | Mitsubishi | AU 2006229008 | | 27/01/2026 | Mobile communications system, handover controlling method, radio network controller and mobile terminal *With effect from 1 July 2010, the effective ownership of this patent has been transferred to Sony Corporation: the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license. | 1 | TS25.331 V6.9.0 Figure 14.1.2.7-1, TS25.331 V6.9.0 S10.3.7.39, TS25.331 V6.9.0 S14.1.1, TS25.331 V6.9.0 S14.1.2, TS25.331 V6.9.0 S14.1.2.7 |
| 320 | | | | | | | |
| T | Mitsubishi | EP 1921765 | DE, FR, GB | 05/03/2019 | Spread spectrum communication device | 1 | TS25.101 V5.3.0 Annex A.5, TS25.101 V5.3.0 Table A.22, TS25.211 V5.4.0 S5.2.1, TS25.211 V5.4.0 Table 2, TS25.212 V5.3.0 Fig. 11, TS25.212 V5.3.0 Fig. 2, TS25.212 V5.3.0 Figure 1, TS25.212 V5.3.0 Figure 14, TS25.212 V5.3.0 Figure 15, TS25.212 V5.3.0 S4.2, TS25.212 V5.3.0 S4.2.11, TS25.212 V5.3.0 S4.2.12, TS25.212 V5.3.0 S4.2.12.1, TS25.212 V5.3.0 S4.4, TS25.212 V5.3.0 S4.4.3, TS25.212 V5.3.0 S4.4.3.2, TS25.212 V5.3.0 S4.4.4, TS25.214 V5.4.0 S5.1.2.2.1, TS25.214 V5.4.0 S5.1.2.2.2.1, TS25.214 V5.4.0 S5.1.2.3, TS25.214 V5.4.0 Table 2, TS25.215 V5.6.0 S6.1.1.1 |
| 321 | | | | | | | |
| T | Mitsubishi | JP 4271714 | | 05/03/2019 | Mobile station | 1 | TS25.101 V5.3.0 Annex A.5, TS25.101 V5.3.0 Table A.22, TS25.201 V5.3.0 S4.1.1, TS25.211 V5.4.0 S3.2, TS25.211 V5.4.0 S5.2.1, TS25.211 V5.4.0 Table 1, TS25.211 V5.4.0 Table 2, TS25.212 V5.3.0 Fig. 2, TS25.212 V5.3.0 Figure 1, TS25.212 V5.3.0 Figure 11, TS25.212 V5.3.0 Figure 14, TS25.212 V5.3.0 Figure 15, TS25.212 V5.3.0 S4.2, TS25.212 V5.3.0 S4.2.11, TS25.212 V5.3.0 S4.2.12.1, TS25.212 V5.3.0 S4.4, TS25.212 V5.3.0 S4.4.3, TS25.212 V5.3.0 S4.4.3.2, TS25.212 V5.3.0 S4.4.4, TS25.214 V5.4.0 Fig 14, TS25.214 V5.4.0 Fig 28, TS25.214 V5.4.0 Fig 30, TS25.214 V5.4.0 S5.1.2.2.1, TS25.214 V5.4.0 S5.1.2.2.2.1, TS25.214 V5.4.0 S5.1.2.3, TS25.214 V5.4.0 Table 2, TS25.214 V5.4.0 Table A.22, TS25.215 V5.6.0 S6.1.1.1 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|---|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 322 | | | | | | | |
| T | Mitsubishi | JP 4266037 | | 05/03/2019 | Mobile station | 1 | TS25.101 V5.3.0 Annex A.5, TS25.101 V5.3.0 Table A.22, TS25.211 V5.4.0 S5.2.1, TS25.211 V5.4.0 Table 2, TS25.212 V5.3.0 Fig. 11, TS25.212 V5.3.0 Fig. 2, TS25.212 V5.3.0 Figure 1, TS25.212 V5.3.0 Figure 14, TS25.212 V5.3.0 S4.2, TS25.212 V5.3.0 S4.2.11, TS25.212 V5.3.0 S4.2.12, TS25.212 V5.3.0 S4.2.12.1, TS25.212 V5.3.0 S4.4, TS25.212 V5.3.0 S4.4.3, TS25.212 V5.3.0 S4.4.3.2, TS25.212 V5.3.0 S4.4.4, TS25.214 V5.4.0 S5.1.2.2.1, TS25.214 V5.4.0 S5.1.2.2.1, TS25.214 V5.4.0 S5.1.2.3, TS25.214 V5.4.0 Table 2, TS25.215 V5.6.0 S6.1.1.1 |
| 323 | | | | | | | |
| T | Siemens | US 7386300 | | 26/08/2023 | Methods for assigning a priority mechanism to at least one group of TLV-objects | 1, 3, 7, 10, 11 | TS31.102 V8.4.0 S1, TS31.102 V8.4.0 S3.3, TS31.102 V8.4.0 S4.2.67, TS31.102 V8.4.0 S4.2.69, TS31.102 V8.4.0 S4.2.8 |
| 324 | | | | | | | |
| T | Fujitsu | US 7515563 | | 17/01/2022 | Communications systems | 1 | TS25.212 V7.9.0 S4.6B.1, TS25.213 V7.0.0 S5.2.1, TS25.214 V7.12.0 Figure 7, TS25.214 V7.12.0 S9 |
| T | Fujitsu | GB 2371947 | | 01/02/2021 | Communications systems | 13 | TS25.212 V7.9.0 Fig 16, TS25.212 V7.9.0 Fig 17, TS25.212 V7.9.0 Fig 7, TS25.212 V7.9.0 S4.1, TS25.212 V7.9.0 S4.2, TS25.212 V7.9.0 S4.5, TS25.212 V7.9.0 S4.5.4, TS25.212 V7.9.0 S4.5.4.3, TS25.212 V7.9.0 S4.6B.1, TS25.213 V7.0.0 S5.2, TS25.213 V7.0.0 S5.2.1, TS25.214 V7.12.0 Figure 7, TS25.214 V7.12.0 S9, TS25.301 V7.4.0 Fig 5.6.9.3-2, TS25.301 V7.4.0 Fig 9a, TS25.301 V7.4.0 S5.3.5, TS25.301 V7.4.0 S5.6.9.3 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
| Last revised on 08 September 2010 | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|---|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 325 | | | | | | | |
| T | Fujitsu | TW 124666 | | 17/03/2019 | Signal process having feedback loop control for decision feedback equalizer. | 60 | TR25.990 V3.0.0 S3, TR25.990 V3.0.0 S4, TS25.211 V7.6.0 Fig. 27, TS25.211 V7.6.0 Fig. 2A, TS25.211 V7.6.0 Fig. 34, TS25.211 V7.6.0 Fig. 35, TS25.211 V7.6.0 S5.2.1.2, TS25.211 V7.6.0 S6.1, TS25.211 V7.6.0 S7.7, TS25.211 V7.6.0 S7.8, TS25.212 V7.9.0 S4.2.3, TS25.212 V7.9.0 S4.5.3, TS25.306 V7.9.0 S4.5.3, TS25.306 V7.9.0 S5, TS25.306 V7.9.0 Table 5.1a, TS25.308 V7.9.0 S5.2.2.1, TS25.321 V7.11.0 S11.6.1, TS25.321 V7.11.0 S11.6.2.2, TS25.321 V7.11.0 S8.1.2 |
| T | Fujitsu | KR 307017 | | 15/04/2019 | Signal Processor having feedback loop control for decision feedback equalizer. | 60 | TR25.990 V3.0.0 S3, TR25.990 V3.0.0 S4.20, TS25.211 V7.6.0 Fig. 27, TS25.211 V7.6.0 Fig. 2A, TS25.211 V7.6.0 Fig. 34, TS25.211 V7.6.0 Fig. 35, TS25.211 V7.6.0 S5.2.1.2, TS25.211 V7.6.0 S6.1, TS25.211 V7.6.0 S7.7, TS25.211 V7.6.0 S7.8, TS25.212 V7.9.0 S4.2.3, TS25.212 V7.9.0 S4.5.3, TS25.306 V7.9.0 S4.5.3, TS25.306 V7.9.0 S5.1, TS25.306 V7.9.0 Table 5.1a, TS25.308 V7.9.0 figure 5.2.2.1-1, TS25.308 V7.9.0 Figure 5.2.2.1-2, TS25.308 V7.9.0 S5.2.2.1, TS25.321 V7.11.0 S11.6.1, TS25.321 V7.11.0 S11.6.2.2, TS25.321 V7.11.0 S8.1.2 |
| 326 | | | | | | | |
| T | Siemens | US 7346646 | | 28/08/2023 | Method and Apparatus for Transmitting Data Frames, and a Method and Apparatus for Data Rate Matching | 8, 17 | TS25.201 V4.0.0 Figure 1, TS25.201 V4.0.0 S4.1.1, TS25.201 V4.0.0 S4.1.2, TS25.212 V4.0.0 S4.1, TS25.212 V4.0.0 S4.2, TS25.212 V4.0.0 S4.2.4, TS25.212 V4.0.0 S4.2.5.2, TS25.212 V4.0.0 S4.2.7, TS25.212 V4.0.0 S4.2.7.1.2, TS25.212 V4.0.0 S4.2.7.1.2.1 |
| 327 | | | | | | | |
| T | Sharp | US 7031370 | | 29/02/2020 | Spread spectrum communication device | 10 | TS25.101 V3.1.0 S6.8.1, TS25.201 V3.0.0 S4.1.1, TS25.201 V3.0.0 S4.2.1, TS25.213 V3.1.1 Figure 1, TS25.213 V3.1.1 Figure 5, TS25.213 V3.1.1 Figure 7, TS25.213 V3.1.1 S4.1, TS25.213 V3.1.1 S4.2.1, TS25.213 V3.1.1 S4.3.2.1, TS25.213 V3.1.1 S4.3.2.2, TS25.213 V3.1.1 S4.3.2.3, TS25.213 V3.1.1 S4.4.2, TS25.213 V3.1.1 Table 1 |
| * Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network | | | | | | | |
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| <u>Patent Family#</u> Product Categories* | <u>Patent Rights Holder(s)</u> | <u>Patent Number</u> | Designated Contracting States (EP only) | <u>Expiry Date of Patent or Licensing Right</u> | <u>Title</u> | <u>Essential Claims</u> | <u>3GPP Standard Sections</u> |
|--|--------------------------------|----------------------|--|---|---|-------------------------|--|
| 328 | | | | | | | |
| T | Mitsubishi | JP 4213117 | | 10/05/2022 | Mobile communication system, base station and mobile station | 3, 5 | TS25.211 V5.8.0 Figure 26A, TS25.211 V5.8.0 S4.1.2.7, TS25.211 V5.8.0 S5.3.3.12, TS25.214 V5.11.0 S6A.1, TS25.214 V5.11.0 S6A.1.1 |
| 329 | | | | | | | |
| T | Mitsubishi | US 7525945 | | 05/03/2019 | Spread spectrum communication device and spread spectrum communication method | 1 | TS25.101 V5.3.0 Annex A.5, TS25.101 V5.3.0 Table A.22, TS25.211 V5.4.0 Figure 1, TS25.211 V5.4.0 S5.2.1, TS25.212 V5.3.0 Fig. 11, TS25.212 V5.3.0 Figure 1, TS25.212 V5.3.0 Figure 14, TS25.212 V5.3.0 S1, TS25.212 V5.3.0 S4.4, TS25.212 V5.3.0 S4.4.3, TS25.214 V5.4.0 S5.1.2.1, TS25.214 V5.4.0 S5.1.2.2.1, TS25.214 V5.4.0 S5.1.2.2.2.1, TS25.214 V5.4.0 S5.1.2.3, TS25.214 V5.4.0 Table 2 |
| 330 | | | | | | | |
| CN, T | Mitsubishi | JP 3346765 | | 07/12/2018 | A speech decoding method and a speech decoding apparatus. | 3, 5 | TS26.173 V5.4.0 S1, TS26.190 V5.0.0 Figure 3, TS26.190 V5.0.0 S2, TS26.190 V5.0.0 S3.2, TS26.190 V5.0.0 S4.3, TS26.190 V5.0.0 S4.4, TS26.190 V5.0.0 S5.7, TS26.190 V5.0.0 S6, TS26.190 V5.0.0 S6.1 |
| CN, T | Mitsubishi | CN 98812682 | | 07/12/2018 | A speech decoding method and a speech decoding apparatus. | 1, 2 | TS26.173 V5.0.0 S1, TS26.190 V5.0.0 Figure 3, TS26.190 V5.0.0 S2, TS26.190 V5.0.0 S3.2, TS26.190 V5.0.0 S4.3, TS26.190 V5.0.0 S4.4, TS26.190 V5.0.0 S5.7, TS26.190 V5.0.0 S6, TS26.190 V5.0.0 S6.1 |
| CN, T | Mitsubishi | KR 10-0373614 | | 07/12/2018 | Sound encoding method and sound decoding method, and sound encoding device and sound decoding device. | 16 | TS26.173 V5.0.0 S1, TS26.190 V5.0.0 Figure 3, TS26.190 V5.0.0 S2, TS26.190 V5.0.0 S3.2, TS26.190 V5.0.0 S4.3, TS26.190 V5.0.0 S4.4, TS26.190 V5.0.0 S5.7, TS26.190 V5.0.0 S6, TS26.190 V5.0.0 S6.1 |
| 331 | | | | | | | |
| T | Siemens | EP 1796406 | AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, NL, PT, SE, TR | 27/06/2021 | Methods, devices and software programs for processing and/or evaluating Multimedia Messaging Service (MMS) messages | 1, 7 | TS21.111 V8.2.0 S4, TS22.038 V8.0.1 Figure 1, TS22.038 V8.0.1 S1, TS22.038 V8.0.1 S4, TS23.140 V6.16.0 Figure 1, TS23.140 V6.16.0 Figure 2, TS23.140 V6.16.0 S3.1, TS23.140 V6.16.0 S4.1, TS23.140 V6.16.0 S4.2, TS23.140 V6.16.0 S5.1.1, TS31.111 V8.4.0 S1, TS31.111 V8.4.0 S6.6.36 |

* Product Categories: T=Terminals, BS=Base Station, RNC=Radio Network Controller, CN=Core Network

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|--|--------------------------------|----------------------|---|---|--|-------------------------|--|
| 332 CN, T | Siemens | US 7305227 | | 23/04/2022 | Cost accounting during data transmission in a mobile radio telephone network | 1, 17 | TS22.140 V6.7.0 S8, TS23.140 V6.14.0 Fig 3, TS23.140 V6.14.0 Fig 6, TS23.140 V6.14.0 Fig 8, TS23.140 V6.14.0 S1, TS23.140 V6.14.0 S5.6, TS23.140 V6.14.0 S6.1, TS23.140 V6.14.0 S7.1, TS23.140 V6.14.0 S7.1.10, TS23.140 V6.14.0 S8.1.4, TS23.140 V6.14.0 S8.1.4.3, TS23.140 V6.14.0 S8.1.4.4, TS23.140 V6.14.0 S8.7.1, TS23.140 V6.14.0 S8.7.1.3, TS23.140 V6.14.0 S8.7.1.4, TS23.140 V6.14.0 Table 58, TS23.140 V6.14.0 Table 59, TS23.140 V6.14.0 Table 7, TS23.140 V6.14.0 Table 8 |
| 333 T | Mitsubishi | JP 4387001 | | 27/08/2019 | Mobile Station and Communication Method *With effect from 1 July 2010, the effective ownership of this patent has been transferred to Sony Corporation: the patents will continue to be licensed only under Joint License Agreements currently in force until the end of the term of the current license. | 1, 3 | TS25.211 V5.4.0 S5.2.1, TS25.211 V5.4.0 Table 2, TS25.212 V5.3.0 Fig. 11, TS25.212 V5.3.0 Figure 14, TS25.212 V5.3.0 Figure 15, TS25.212 V5.3.0 S4.4, TS25.212 V5.3.0 S4.4.3, TS25.212 V5.3.0 S4.4.4, TS25.214 V5.4.0 S5.1.2.2.1, TS25.214 V5.4.0 S5.1.2.2.2.1, TS25.214 V5.4.0 S5.1.2.3, TS25.214 V5.4.0 Table 2 |
| 334 T | FT | KR 10-0549133 | | 19/11/2021 | Noise Reduction Method and Device using two pass Filtering. | 10 | TS22.243 V8.0.0 figure 1, TS22.243 V8.0.0 S1, TS22.243 V8.0.0 S2.1, TS22.243 V8.0.0 S2.2, TS22.243 V8.0.0 S3.1, TS22.243 V8.0.0 S4, TS22.243 V8.0.0 S5, TS22.243 V8.0.0 S7, TS26.177 V8.0.0 S2, TS26.243 V8.0.0 S2 |

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|--|--------------------------------|----------------------|---|---|--------------------------|-------------------------|--|
| CN, RNC, T | FT | EP 1741264 | DE, ES, FR, GB, IT | 19/04/2025 | Telecommunication system | 1 | TS23.060 V8.7.0 Figure 63, TS23.060 V8.7.0 Figure 64, TS23.060 V8.7.0 Figure 6a, TS23.060 V8.7.0 figure 6b, TS23.060 V8.7.0 Figure 6c, TS23.060 V8.7.0 Figure 6d, TS23.060 V8.7.0 Figure 7, TS23.060 V8.7.0 Figure 8, TS23.060 V8.7.0 S4, TS23.060 V8.7.0 S5.3.2.4, TS23.060 V8.7.0 S5.3.2.5, TS23.060 V8.7.0 S5.5., TS23.060 V8.7.0 S5.6.2.1, TS23.060 V8.7.0 S5.6.2.2, TS23.060 V8.7.0 S5.6.3, TS23.060 V8.7.0 S5.6.3.1, TS23.060 V8.7.0 S5.6.3.2, TS23.060 V8.7.0 S9.2.1, TS23.060 V8.7.0 S9.2.2.1, TS23.060 V8.7.0 Table 1, TS23.228 V8.9.0 E0, TS23.228 V8.9.0 E5, TS23.228 V8.9.0 Figure 5.5.b, TS23.228 V8.9.0 S4.6.0, TS23.228 V8.9.0 S4.6.1, TS23.228 V8.9.0 S5.4.2a, TS23.401 V8.8.0 Figure 5.1.1.4-1, TS23.401 V8.8.0 Figure 5.1.1.5-1, TS23.401 V8.8.0 Figure 5.1.1.6-1, TS23.401 V8.8.0 Figure 5.1.1.7-1, TS23.401 V8.8.0 Figure 5.1.1.8-1, TS23.401 V8.8.0 Figure 5.1.2.1-1, TS23.401 V8.8.0 Figure 5.1.2.2-1, TS23.401 V8.8.0 Figure 5.1.2.3-1, TS23.401 V8.8.0 Figure 5.1.2.4-1, TS23.401 V8.8.0 Figure 5.1.2.5-1, TS23.401 V8.8.0 S5.1, TS23.401 V8.8.0 S5.1.1.1, TS23.401 V8.8.0 S5.1.1.4, TS23.401 V8.8.0 S5.1.1.5, TS23.401 V8.8.0 S5.1.1.6, TS23.401 V8.8.0 S5.1.1.7, TS23.401 V8.8.0 S5.1.1.8, TS23.401 V8.8.0 S5.1.2.1, TS23.401 V8.8.0 S5.1.2.2, TS23.401 V8.8.0 S5.1.2.3, TS23.401 V8.8.0 S5.1.2.4, TS23.401 V8.8.0 S5.1.2.5, TS23.402 V8.8.0 A.1, TS23.402 V8.8.0 A.2, TS23.402 V8.8.0 Annex A, TS23.402 V8.8.0 Figure 4.2.2-2, TS23.402 V8.8.0 Figure 5.1.3.1-1, TS23.402 V8.8.0 Figure 5.1.4.2-1, TS23.402 V8.8.0 Figure 5.1.4.3-1, TS23.402 V8.8.0 Figure 5.1.4.4-1, TS23.402 V8.8.0 Figure 5.1.4-1, TS23.402 V8.8.0 Figure 6.1.2-1, TS23.402 V8.8.0 Figure A.1-1, TS23.402 V8.8.0 Figure A.1-2, TS23.402 V8.8.0 Figure A.1-3, TS23.402 V8.8.0 Figure A.2-1, TS23.402 V8.8.0 S1, TS23.402 V8.8.0 S4.2.2, TS23.402 V8.8.0 S4.3.3.2, TS23.402 V8.8.0 S4.3.3.3, TS23.402 V8.8.0 S4.3.4, TS23.402 V8.8.0 S5.1.2, TS23.402 V8.8.0 S5.1.3.1, TS23.402 V8.8.0 S5.1.4.1, TS23.402 V8.8.0 S5.1.4.2, TS23.402 V8.8.0 S5.1.4.3, TS23.402 V8.8.0 S5.1.4.4, TS23.402 V8.8.0 S6.1.2, TS29.060 V8.11.0 Figure 1, TS29.060 V8.11.0 S3.1, TS29.060 V8.11.0 |

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|--|--------------------------------|----------------------|---|---|---|-------------------------|---|
| | | | | | | | S4.1 |
| 336 BS, T | Toshiba | US 11/272736 | | 20/06/2015 | Radio Communication Method including SDL having transmission rate of relatively high speed. | 2 | TR21.905 V5.10.0 S3, TS25.101 V5.20.0 S5.2, TS25.101 V5.20.0 S6.1, TS25.101 V5.20.0 S7.1, TS25.101 V5.20.0 Table 5, TS25.104 V5.13.0 S6.1, TS25.104 V5.13.0 S7.1, TS25.306 V5.15.0 S5.2.2, TS25.306 V5.15.0 S5.2.3, TS25.306 V5.15.0 table 5.2.2.2, TS25.306 V5.15.0 table 5.2.3.1, TS25.308 V5.7.0 figure 9.1-1, TS25.308 V5.7.0 S9.1 |
| 337 T | NTT DoCoMo | EP 1691513 | DE, FI, FR, GB, IT, NL, SE, TR | 14/02/2026 | Transmission Rate Control Method, and Mobile Station. | 1, 2 | TS25.309 V6.6.0 S10, TS25.309 V6.6.0 S3.1, TS25.309 V6.6.0 S9.1, TS25.331 V6.22.0 B.3.1.5, TS25.331 V6.22.0 S10.2.8, TS25.331 V6.22.0 S10.3.5.1b, TS25.331 V6.22.0 S10.3.5.2, TS25.331 V6.22.0 S8.6.5.18 |
| 338 BS, T | NTT DoCoMo | EP 1914945 | DE, FI, FR, GB, IT, NL, SE, TR | 02/02/2026 | Mobile Communication System, Radio Base Station, Mobile Station, and Mobile Communication Method. | 2, 3, 4 | TS25.211 V6.9.0 Figure 26B, TS25.211 V6.9.0 Figure 26C, TS25.211 V6.9.0 Figure 29, TS25.211 V6.9.0 Figure 35, TS25.211 V6.9.0 Figure 39, TS25.211 V6.9.0 S3.2, TS25.211 V6.9.0 S4.1.2.7, TS25.211 V6.9.0 S5.3.3.13, TS25.211 V6.9.0 S5.3.3.14, TS25.211 V6.9.0 S7.1, TS25.211 V6.9.0 S7.12, TS25.211 V6.9.0 S7.8, TS25.321 V6.18.0 Figure 4.2.3.1, TS25.321 V6.18.0 S4.2.3, TS25.321 V6.18.0 S9.2.5.2.2 |
| 339 BS, RNC, T | NEC | KR 446320 | | 29/06/2021 | Transmission power balance adjustment system and method for cellular communication systems | 46, 48 | TS23.002 V3.6.0 Fig. 1, TS23.002 V3.6.0 S5.1, TS25.402 V3.10.0 S5, TS25.433 V3.14.2 Fig. 37, TS25.433 V3.14.2 S8.3.7.2, TS25.433 V3.14.2 S9.1.51, TS25.433 V3.14.2 S9.2.2.B |
| 340 BS, RNC, T | NEC | US 7565164 | | 25/06/2021 | Apparatus and method for transmission power balance adjustment in a mobile cellular system | 1, 7 | TS23.002 V3.6.0 Fig. 1, TS23.002 V3.6.0 S5.1, TS25.402 V3.10.0 S5, TS25.433 V3.14.2 Fig. 37, TS25.433 V3.14.2 S8.3.7, TS25.433 V3.14.2 S8.3.7.2, TS25.433 V3.14.2 S9.1.51, TS25.433 V3.14.2 S9.2.2 |

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|--|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 341 T | NTT DoCoMo | EP 1720302 | DE, FI, FR, GB, IT, NL, SE, TR | 02/05/2026 | Transmission Rate Control Method and Mobile Station. | 1, 2 | TS25.309 V6.6.0 S9.1, TS25.321 V6.18.0 S11.8.1.1.1, TS25.321 V6.18.0 S11.8.1.3.1, TS25.321 V6.18.0 S11.8.1.4, TS25.321 V6.18.0 S3.1.2, TS25.321 V6.18.0 S9.2.5.2.1, TS25.321 V6.18.0 S9.2.5.2.2 |
| 342 RNC, T | NTT DoCoMo | EP 1708534 | DE, FI, FR, GB, IT, NL, SE, TR | 29/03/2026 | Transmission rate control method, mobile station, and radio base station. | 1, 3 | TS25.213 V6.5.0 S4.2.1.1, TS25.213 V6.5.0 S4.2.1.3, TS25.309 V6.6.0 S9.1, TS25.321 V6.18.0 Annex B, TS25.321 V6.18.0 S11.8.1.4, TS25.321 V6.18.0 S3.1.2, TS25.321 V6.18.0 S9.2.5.2.2, TS25.331 V6.22.0 S10.2.33, TS25.331 V6.22.0 S10.3.6.97, TS25.331 V6.22.0 S10.3.6.99 |
| 343 RNC, T | NTT DoCoMo | EP 1755290 | DE, FI, FR, GB, IT, NL, SE, TR | 18/08/2026 | Transmission rate control method, mobile station, radio base station, and radio network controller. | 1, 3, 5 | TS25.211 V6.9.0 S5.3.2.4, TS25.309 V6.6.0 S9.1, TS25.321 V6.18.0 S9.2.5.2.1, TS25.321 V6.18.0 S9.2.5.2.2, TS25.331 V6.22.0 S10.2.33, TS25.331 V6.22.0 S10.3.6.100, TS25.331 V6.22.0 S10.3.6.101, TS25.331 V6.22.0 S10.3.6.102, TS25.331 V6.22.0 S10.3.6.27, TS25.331 V6.22.0 S8.6.6.4 |
| 344 BS, RNC, T | NTT DoCoMo | EP 1760962 | DE, FI, FR, GB, IT, NL, SE, TR | 30/08/2026 | Transmission control method, mobile station, radio base station, and radio network controller. | 1, 2, 3, 4 | TS25.309 V6.6.0 S10, TS25.309 V6.6.0 S9.1, TS25.309 V6.6.0 S9.3.1.1.3, TS25.321 V6.18.0 S11.8.1.1.1, TS25.321 V6.18.0 S3.1.2, TS25.331 V6.22.0 Figure 8.3.1-1, TS25.331 V6.22.0 S10.2.8, TS25.331 V6.22.0 S10.3.5.1b, TS25.331 V6.22.0 S10.3.5.2, TS25.331 V6.22.0 S10.3.6.97, TS25.331 V6.22.0 S8.3.1, TS25.331 V6.22.0 S8.6.5.18, TS25.433 V6.17.0 Figure 24, TS25.433 V6.17.0 S8.2.17.2 |

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|--|--------------------------------|----------------------|---|---|---|-------------------------|--|
| 345 | | | | | | | |
| BS, RNC, T | NTT DoCoMo | JP 3795743 | | 17/11/2020 | Data Transmission Method, Data Transmission System, Transmitter and Receiver. | 1, 10, 12 | TS25.212 V5.10.0 Figure 2, TS25.212 V5.10.0 S4.2, TS25.212 V5.10.0 S4.2.1.1, TS25.212 V5.10.0 S4.2.1.2, TS25.212 V5.10.0 S4.2.6, TS25.212 V5.10.0 S4.2.9, TS25.212 V5.10.0 S4.2.9.1, TS25.212 V5.10.0 S4.3, TS25.212 V5.10.0 S4.3.1a, TS25.301 V5.6.0 S5.2.2, TS25.302 V5.9.0 Figure 6, TS25.302 V5.9.0 S5.1, TS25.302 V5.9.0 S5.2, TS25.302 V5.9.0 S5.3, TS25.302 V5.9.0 S7.1.1, TS25.302 V5.9.0 S7.1.2, TS25.302 V5.9.0 S7.1.5, TS25.322 V5.13.0 S10.4, TS25.427 V5.5.0 S5.1.2 |

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