Amended

Exhibit 11

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Exhibit 11 Claim 15 of U.S. Patent No. 10,96



Case 2:22-md-03034-TGB, ECF No. 28-12, Page D 321, Filed 07/20/22 Page 3 of U.S. Patent No. 10,965,512: Claim 15(a)

"15. An orthogonal frequency division multiple access (OFDMA)-compatible mobile station that uses subcarriers in a fr a time domain, the OFDMA-compatible mobile station comprising:"

15. An orthogonal frequency division multiple access (OFDMA)-compatible mobile station that uses subcarriers in a frequency domain and time slots in a time domain, the OFDMA-compatible mobile station comprising:

Ford's Accused Products include vehicles equipped with components and/or connectivity to 4G/LTE networks and services, including services sold and p

To the extent the preamble is considered a limitation, Ford's Accused Producthe '512 patent. *E.g.*,

For clarity, release 8 of the 36 series 3GPP specifications was frozen in Dece was used as the basis for the first wave of LTE equipment. The LTE market releases from Release 8 through Release 17. Though for ease of review released telebolow, the same or functionally identical content exists in each correspondent

The LTE specification (starting at Series 36, Release 8) supports user equipme NodeBs.



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"15. An orthogonal frequency division multiple access (OFDMA)-compatible mobile station that uses subcarriers in a fr a time domain, the OFDMA-compatible mobile station comprising:"

4 Overall architecture

The E-UTRAN consists of eNBs, providing the E-UTRA user plane (PDCP/RLC/MAC/P protocol terminations towards the UE. The eNBs are interconnected with each other by meNBs are also connected by means of the S1 interface to the EPC (Evolved Packet Core), (Mobility Management Entity) by means of the S1-MME and to the Serving Gateway (S-The S1 interface supports a many-to-many relation between MMEs / Serving Gateways as

The E-UTRAN architecture is illustrated in Figure 4 below.

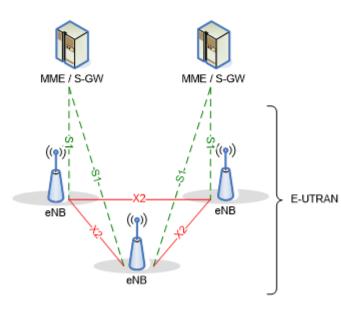


Figure 4-1: Overall Architecture

See e.g., 3GPP TS 36.300 V8.12.0 at pg. 15.

LTE uses OFDMA in the downlink transmission.



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"15. An orthogonal frequency division multiple access (OFDMA)-compatible mobile station that uses subcarriers in a fr a time domain, the OFDMA-compatible mobile station comprising:"

5.1 Downlink Transmission Scheme

5.1.1 Basic transmission scheme based on OFDM

The downlink transmission scheme is based on conventional OFDM using a cyclic prefix. spacing is $\Delta f = 15$ kHz. 12 consecutive sub-carriers during one slot correspond to one down frequency domain, the number of resource blocks, NRB, can range from NRB-min = 6 to NRB-

In addition there is also a reduced sub-carrier spacing ∆flow = 7.5 kHz, only for MBMS-ded:

In the case of 15 kHz sub-carrier spacing there are two cyclic-prefix lengths, corresponding symbols per slot respectively.

- Normal cyclic prefix: Tcp = 160×Ts (OFDM symbol #0)_, Tcp = 144×Ts (OFDM symbol #0)_
- Extended cyclic prefix: $T_{CP-e} = 512 \times Ts$ (OFDM symbol #0 to OFDM symbol #5) where $T_s = 1/(2048 \times \Delta f)$

In case of 7.5 kHz sub-carrier spacing, there is only a single cyclic prefix length T_{CP-low} = 1 OFDM symbols per slot.

See e.g., 3GPP TS 36.300 V8.12.0 at pg. 25.

Each frame structure has time slots. For example, Frame structure type 1 for

4.1 Frame structure type 1

Frame structure type 1 is applicable to both full duplex and half duplex FDD. Each radio for $T_{\rm f}=307200$ $\cdot T_{\rm s}=10$ ms. long and consists of 20 slots of length $T_{\rm slot}=15360$ $\cdot T_{\rm s}=0.5\,{\rm ms}$, subframe is defined as two consecutive slots where subframe i consists of slots 2i and 2i-



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