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(71) **Applicant** (for all designated States except US): **QUALCOMM INCORPORATED** [US/US]; Attn: International IP Administration, 5775 Morehouse Drive, San Diego, CA 92121 (US).

(72) Inventors; and

(75) **Inventors/Applicants (for US only): WERNER, Marc, W.** [DE/DE]; 5775 Morehouse Drive, San Diego, CA 92121 (US). **PIETSCH, Christian** [DE/DE]; 5775 Morehouse Drive, San Diego, CA 92121 (US). **SGRAJA, Christian** [DE/DE]; 5775 Morehouse Drive, San Diego, CA 92121 (US). **GRANZOW, Wolfgang** [DE/DE]; 5775

Morehouse Drive, San Diego, CA 92121 (US). **LEUNG, Nikolai, K.N.** [US/US]; 5775 Morehouse Drive, San Diego, CA 92121 (US). **JOETTEN, Christoph, A.** [DE/DE]; 5775 Morehouse Drive, San Diego, CA 92121 (US). **HUANG, Pengjun** [US/US]; 5775 Morehouse Drive, San Diego, CA 92121 (US).

(74) Agent: **DEHAEMER, Micheal, Jr.**; 5775 Morehouse Drive, San Diego, CA 92121 (US).

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Declarations under Rule 4.17:

[Continued on next page]

(54) Title: SYSTEM AND METHOD OF AN IN-BAND MODEM FOR DATA COMMUNICATIONS OVER DIGITAL WIRELESS COMMUNICATION NETWORKS

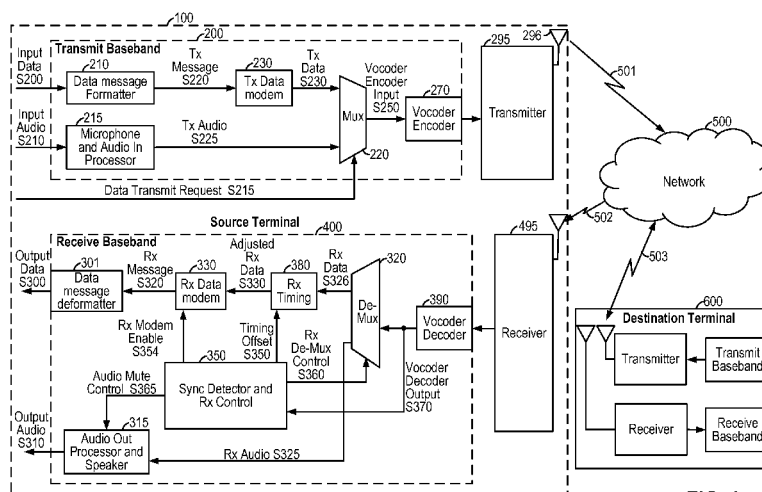


FIG. 1

(S7) Abstract: A system is provided for transmitting information through a speech codec (inband) such as found in a wireless communication network. A modulator transforms the data into a spectrally noise-like signal based on the mapping of a shaped pulse to predetermined positions within a modulation frame, and the signal is efficiently encoded by a speech codec. A synchronization sequence provides modulation frame timing at the receiver and is detected based on analysis of a correlation peak pattern. A request/response protocol provides reliable transfer of data using message redundancy, retransmission, and/or robust modulation modes dependent on the communication channel conditions.



- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*
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