

The attached list includes patents owned by AT&T that may be pertinent to possible implementations of wideband speech coding covered by the draft recommendation. Patent 4,048,443 may have particular relevance. Omission of pertinent patents from the list shall not be deemed a waiver or relinquishment of any rights with respect thereto. In some instances, the United States patent has foreign counterparts that are not contained on the attached list. It is also to be noted that inclusion of any patent in the list in no way implies that implementation of wideband speech coding in accordance with the recommendation will result in a violation of any patent rights.

pat_no	case_no	title
3,566,035	A M Noll 5	Real Time Cepstrum Analyzer
3,631,520	B S Atal 3	Predictive Coding of Speech-Signals
3,652,957	D J Goodman 2	Adaptive Delta Modulator
3,703,688	J L Flanagan 27	Digital Adaptive-to-Linear Delta-Modulated Signal Converter
3,772,682	J L Flanagan 29	Digital Conversion from One PCM format to Another
3,897,591	A A Lundstrom	Secret Transmission of Intelligence
3,924,074	E Peterson	Pulse Position Modulation-Key Signaling System
3,925,616	M M Sondhi	Apparatus for Determining-the Glottal Waveform
3,967,067	R K Potter	Secret Telephony
3,985,958	H W Dudley	Secret Telephony
3,995,115	J M Kelly	Speech Privacy System
4,048,443	R E Crochiere 3-34-1	Digital Speech Communication System-For Minimizing Quantizing Noise
4,100,377	J L Flanagan 36	Packet Transmission-of speech
4,133,976	B S Atal 6	Predictive Speech Signal Coding-With Reduced Noise Effects
4,142,066	S V Ahamed 4	Suppression of Idle Channel Noise-in Delta Modulation Systems
4,184,049	R E Crochiere	Transform Speech Signal-Coding with pitch-controlled adaptive-quantizing
4,189,627	J L Flanagan 38	Electroacoustic Transducer Filter Assembly
4,220,819	B S Atal 7	Residual Excited Predictive Speech Coding System
4,354,057	B S Atal 8	Predictive Signal Coding With-Partitioned Quantization
4,375,581	N S Jayant	Digital Transmission ~ Error Reduction
4,395,593	J L Flanagan 41	Acoustic differential-Digital Coder

4,417,102	J B Allen	Noise and bit rate- reduction arrangements
4,437,087	D W Petr	Adaptive differential PCM coding
4,449,190	J L Flanagan 42-2	Silence Editing-Speech Processor
4,472,832	B S Atal 9-1	Digital speech coder
4,512,013		Simultaneous transmission of-speech and data over voice
4,518,950	D W Petr	Digital Code Converter