

Title (en)
Audio signal processing

Title (de)
Audiosignalverarbeitung

Title (fr)
Traitement de signal audio

Publication
EP 0987680 A1 20000322 (EN)

Application
EP 99202980 A 19990913

Priority
• EP 99202980 A 19990913
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Abstract (en)
A speech coder (14) is operable to compress digital data representing speech using a Waveform Interpolation speech coding method. The coding method is carried out on the residual signal from a Linear Predictive Coding stage. On the basis of a series of overlapping frames of the residual signal, a series of respective spectra are found. The evolution of the spectra is filtered in a multi-stage filtering process, the filtered phase data being replaced with the original phase data at the end of each stage. This is found to result in the decoder (28) being better able to approximate the original speech signal. This is of particular utility in relation to mobile telephony. <IMAGE>

IPC 1-7
G10L 11/00

IPC 8 full level
G10L 19/08 (2006.01); **G10L 19/097** (2013.01); **G10L 11/06** (2006.01)

CPC (source: EP)
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Citation (search report)
• [A] EP 0666557 A2 19950809 - AT & T CORP [US]
• [A] EP 0865029 A1 19980916 - LUCENT TECHNOLOGIES INC [US]
• [A] WO 9805029 A1 19980205 - BRITISH TELECOMM [GB], et al
• [A] CHONG ET AL.: "Use of the pitch synchronous wavelet transform as a new decomposition method for WI", PROCEEDINGS OF THE 1998 IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING, ICASSP '98, vol. 1, 12 May 1998 (1998-05-12) - 15 May 1998 (1998-05-15), SEATTLE, WA, US, pages 513 - 516, XP002093343
• [DA] KLEIJN: "ENCODING SPEECH USING PROTOTYPE WAVEFORMS", IEEE TRANSACTIONS ON SPEECH AND AUDIO PROCESSING, vol. 1, no. 4, 1 October 1993 (1993-10-01), New York, NY, US, pages 386 - 399, XP000422852
• [DA] KLEIJN ET AL.: "A speech coder based on decomposition of characteristic waveforms", PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING (ICASSP 1995), vol. 1, 9 May 1995 (1995-05-09) - 12 May 1995 (1995-05-12), DETROIT, MI, US, pages 508 - 511, XP000658042

Cited by
CN100362568C; EP1796083A3; KR100754580B1; KR100752001B1; EP1617416A3; WO0182293A1; US7426466B2; US8660840B2

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