

Title (en)
Voice activity detector

Title (de)
Anordnung zur Feststellung der Anwesenheit von Sprachlauten

Title (fr)
Dispositif de détection de la présence d'un signal de parole

Publication
EP 0548054 B1 20021211 (EN)

Application
EP 93200015 A 19890310

Priority
• EP 89302422 A 19890310
• GB 8805795 A 19880311
• GB 8813346 A 19880606
• GB 8820105 A 19880824

Abstract (en)
[origin: EP0335521A1] Voice activity detector (VAD) for use in an LPC coder in a mobile radio system, uses autocorrelation coefficients R_0, R_1, \dots of the input signal, weighted and combined, to provide a measure M which depends on the power within that part of the spectrum containing no noise, which is thresholded against a variable threshold to provide a speech/no speech logic output. The measure is $\langle \text{MATH} \rangle$ where H_i are the autocorrelation coefficients of the impulse response of an N th order FIR inverse noise filter derived from LPC analysis of previous non-speech signal frames. Threshold adaption and coefficient update are controlled by a second VAD responsive to rate of spectral change between frames.

IPC 1-7
G10L 11/02

IPC 8 full level
G10L 11/00 (2006.01); **G10L 11/02** (2006.01); **G10L 15/04** (2006.01); **G10L 25/00** (2013.01); **G10L 25/78** (2013.01)

CPC (source: EP KR)
G10L 25/00 (2013.01 - EP); **G10L 25/78** (2013.01 - EP KR); **G10L 25/84** (2013.01 - KR)

Cited by
CN102576528A; AU673776B2; CN108985277A; US8223988B2; US8175871B2; US8954324B2; WO9508170A1; WO2011049516A1; US9773511B2; US9990938B2; US11361784B2; KR100363309B1

Designated contracting state (EPC)
AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)
EP 0335521 A1 19891004; EP 0335521 B1 19931124; AU 3355489 A 19891005; AU 608432 B2 19910328; BR 8907308 A 19910319; CA 1335003 C 19950328; DE 68910859 D1 19940105; DE 68910859 T2 19941208; DE 68929442 D1 20030123; DE 68929442 T2 20031002; DK 175478 B1 20041108; DK 215690 A 19900907; DK 215690 D0 19900907; EP 0548054 A2 19930623; EP 0548054 A3 19940112; EP 0548054 B1 20021211; ES 2047664 T3 19940301; ES 2188588 T3 20030701; FI 110726 B 20030314; FI 115328 B 20050415; FI 20010933 A 20010504; FI 904410 A0 19900907; HK 135896 A 19960802; IE 61863 B1 19941130; IE 890774 L 19890911; JP 2000148172 A 20000526; JP 3321156 B2 20020903; JP 3423906 B2 20030707; JP H03504283 A 19910919; KR 0161258 B1 19990320; KR 900700993 A 19900817; NO 304858 B1 19990222; NO 316610 B1 20040308; NO 903936 D0 19900910; NO 903936 L 19901109; NO 982568 D0 19980604; NO 982568 L 19901109; NZ 228290 A 19920129; PT 89978 A 19891110; PT 89978 B 19950301; WO 8908910 A1 19890921

DOCDB simple family (application)
EP 89302422 A 19890310; AU 3355489 A 19890310; BR 8907308 A 19890310; CA 593386 A 19890310; DE 68910859 T 19890310; DE 68929442 T 19890310; DK 215690 A 19900907; EP 93200015 A 19890310; ES 89302422 T 19890310; ES 93200015 T 19890310; FI 20010933 A 20010504; FI 904410 A 19900907; GB 8900247 W 19890310; HK 135896 A 19960725; IE 77489 A 19890310; JP 32819899 A 19991118; JP 50377289 A 19890310; KR 890702099 A 19891109; NO 903936 A 19900910; NO 982568 A 19980604; NZ 22829089 A 19890310; PT 8997889 A 19890310