Title (en)

NOISE REDUCTION DEVICE AND A NOISE REDUCTION METHOD

Title (de)

GERÄUSCHVERMINDERUNGSVORRICHTUNG UND GERÄUSCHVERMINDERUNGSVERFAHREN

Title (fr)

DISPOSITIF ET PROCEDE DE REDUCTION DE BRUITS

Publication

EP 0992978 A1 20000412 (EN)

Application

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Priority

- JP 9805512 W 19981207
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Abstract (en)

A noise reduction method which reduces unpleasant residual noise even when movement to or from noise frames is frequent and the spectrum of each frame unevenly includes certain frequencies. In a spectral subtraction noise reduction method for producing an output by subtracting by a spectral subtraction filter an estimated noise amplitude spectrum from an amplitude spectrum created by orthogonal-transforming an input signal segmented to a predetermined frame length, the subtraction rate of the spectral subtraction filter is variable according to the estimated noise amplitude spectrum and an amplitude adjusting filter circuit (6) is used. The amplitude adjust filter circuit (6) multiplies the output produced by subtraction by the spectral subtraction filter for each frame, by an amplitude adjusting coefficient to produce a desired output. The amplitude adjusting coefficient is determined by the power of the amplitude spectrum (9) and the power of the estimated noise amplitude spectrum (10). <IMAGE>

IPC 1-7 (main, further and additional classification)

G10L 3/00; G10L 3/02

IPC 8 full level (invention and additional information)

G10L 11/00 (2006.01); **G10L 15/04** (2006.01); **G10L 15/20** (2006.01); **G10L 21/02** (2006.01)

CPC (invention and additional information)

G10L 15/04 (2013.01); **G10L 15/20** (2013.01); **G10L 21/02** (2013.01)

Cited by

EP1914727A4; GB2422237A; US2010207689A1; EP3232589A3; EP3276621A1; US9318122B2; US8160732B2

Designated contracting state (EPC)

DE FI FR GB IT SE

EPO simple patent family

WO 9950825 A1 19991007; AU 1352599 A 19991018; AU 721270 B2 20000629; CA 2291826 A1 19991007; CN 1258368 A 20000628; EP 0992978 A1 20000412; EP 0992978 A4 20020116; KR 100314332 B1 20011116; KR 20000076037 A 20001226

INPADOC legal status

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