

Title (en)  
TRANSCODER AND CODER CONVERSION METHOD

Title (de)  
TRANSKODER UND KODIERKONVERTIERUNGSVERFAHREN

Title (fr)  
TRANSCODEUR ET PROCEDE DE CONVERSION PAR CODEUR

Publication  
**EP 1564723 B1 20080618 (EN)**

Application  
**EP 03751372 A 20031008**

Priority  
• JP 0312859 W 20031008  
• JP 2002317204 A 20021031

Abstract (en)  
[origin: EP1564723A1] A two-way conversion transcoder comprising a spectrum parameter calculation circuit (100) that calculates a spectrum parameter for a signal  $x(n)$  produced by decoding a first code; a coefficient calculation circuit (130) that receives the spectrum parameter and converts it to the coefficients of a band extended signal, a noise generation circuit (120) that outputs a band-limited noise signal, a gain circuit (140) that multiplies the output signal of the noise generation circuit by a gain, a synthesis filter circuit (170) that receives the output signal from the noise generation circuit (120) and the coefficients from the coefficient calculation circuit (130) and outputs a high frequency signal  $y(n)$  for band extension, a sampling frequency conversion circuit (180) that outputs a signal  $s(n)$  generated by up-sampling the signal  $x(n)$  to a predetermined sampling frequency, an adder (190) that adds up a high-frequency signal  $y(n)$  and the signal  $s(n)$  to form a band extended signal  $z(n)$ , and a second encoding circuit (195) that encodes the band extended signal  $z(n)$  by a second encoding method and outputs the encoded signal. <IMAGE>

IPC 8 full level  
**G10L 19/12** (2013.01); **G10L 19/00** (2013.01); **G10L 19/07** (2013.01); **G10L 21/0388** (2013.01); **H03M 7/30** (2006.01)

CPC (source: EP KR)  
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Cited by  
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**EP 1564723 A1 20050817**; **EP 1564723 A4 20051221**; **EP 1564723 B1 20080618**; AU 2003271119 A1 20040525; CA 2504174 A1 20040513; CN 100498933 C 20090610; CN 1708786 A 20051214; DE 60321712 D1 20080731; HK 1077913 A1 20060224; JP 2004151424 A 20040527; JP 4438280 B2 20100324; KR 100715014 B1 20070509; KR 20050061579 A 20050622; WO 2004040552 A1 20040513

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