

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC
Petitioner

v.

UNILOC 2017 LLC
Patent Owner

Patent No. 7,012,960

DECLARATION OF JEFFREY J. RODRIGUEZ, PH.D.

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	a) A method of transcoding a primary encoded signal (S1) comprising a sequence of pictures, into a secondary encoded signal (S2), said method of transcoding comprising at least the steps of:.....	42
	b) decoding a current picture of the primary encoded signal,.....	49

c)	said decoding step comprising a dequantizing sub-step (12) for producing a first transformed signal (R1),.....	53
d)	encoding, following the decoding step, for obtaining the secondary encoded signal,.....	57
e)	said encoding step comprising a quantizing sub-step (13),.....	61
f)	wherein said method of transcoding further comprises a filtering step between the dequantizing sub-step and the quantizing sub-step, said filtering step using a recursive filter.....	63
g)	wherein the recursive filtering step is intended to use a recursive filter such as: $Rf[i]=(1-\alpha[i])(R1[i]+Rmc[i])$, where $Rf[i]$, $R1[i]$ and $Rmc[i]$ are transformed coefficients comprised in the transformed signals (Rf,R1,Rmc) and $\alpha[i]$ is a filter coefficient comprised between 0 and 1; and	78
h)	predicting a transformed motion-compensated signal from a transformed encoding error derived from the encoding step,	79
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a)	A method of transcoding a primary encoded signal comprising a sequence of pictures, into a secondary encoded signal, said method of transcoding comprising at least the steps of:.....	98
b)	decoding a current picture of the primary encoded signal,.....	98
c)	said decoding step comprising a dequantizing sub-step for producing a first transformed signal,.....	99
d)	encoding, following the decoding step, for obtaining the secondary encoded signal,.....	99
e)	said encoding step comprising a quantizing sub-step,.....	99
f)	wherein said method of transcoding further comprises a filtering step between the dequantizing sub-step and the quantizing sub-step; and	99
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h)	said prediction step being situated between the encoding and decoding steps,	112
i)	wherein the filtering step is a spatial filtering step for receiving the transformed motion-compensated signal and the first transformed signal and for delivering a filtered transformed signal to the quantizing sub-step,.....	113
j)	said spatial filtering step being only applied to intra-coded macroblocks contained in the current picture.	117
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a)	A method of transcoding as claimed in claim 4, characterized in that it further comprises a detection step for giving a label to a current macroblock, the spatial filtering step being adapted to apply a filter to the current macroblock as a function of said label.	118
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